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Series B - 104

# THE MELANESIAN CONTENT IN TOK PISIN

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Typeset by Anne Rees

Printed by A.N.U. Printing Service

The editors are indebted to the Australian National University for assistance in the production of this series

This publication was made possible by an initial grant from the Hunter Douglas Fund

ISSN 0078-754X

First Published 1990

Maps drawn by Theo Baumann

Bound by F & M Perfect Bookbinding

ISBN 0 85883 397 2

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## PREFACE

A major concern in the study of pidgins and creoles is the source of the syntactic structures of these languages. In this study, a revision of my 1987 doctoral dissertation, I seek to establish the influence of Austronesian languages spoken in Melanesia on the creation of Melanesian Pidgin English and to examine how such substratum influence interacts with simplification and independent development to explain the structure of the modern Bislamic language Tok Pisin. Substratum influence is most evident where the substrate languages possess a common semantic content which is reproduced in the pidgin. The lexical resources available after the target language has been partly learned constrain the ways in which this areal semantic content is expressed syntactically. Both lexical limitations and the need for agreement among the substrate languages result in a language that is simpler than any of its progenitors. Independent development then promotes the productivity of certain structures in the newly created pidgin. Each modern Bislamic language thus possesses unique syntactic structures, but these are ultimately derived from the substratum influence that acted upon the formation of Melanesian Pidgin English.

Since this was first written in 1986, a number of researchers have produced relevant and interesting work on many of the topics addressed in this study, such as Baker (1987), Keesing (1988a) and Tryon (1988b) on the history of pidgins in the Pacific, and Crowley (1987a), Tryon (1988a), Jourdan (1986) and Keesing (1986, 1987, 1988a) on the structure of Bislama and Pijin.

At about the same time as I was writing my dissertation, Crowley (1987b, 1988) and Keesing (1986, 1987, 1988a, 1988b) were independently producing comparable work on substratum influence in Bislama and Pijin respectively. Their research is especially relevant to this study, since they have not only provided much needed information on Tok Pisin's sister languages in Vanuatu and the Solomon Islands (largely lacking when I first began my dissertation), but have also extended the substratum argument to those languages which are more central to a thorough understanding of the history of Melanesian Pidgin English than are Tok Pisin and the vernacular languages of Papua New Guinea. I have tried, where relevant, to incorporate these research developments into the original work.

Keesing (1988a) argues that a stabilised, relatively homogeneous lingua franca developed initially through extensive contact in the central Pacific and Polynesia, especially in the Carolines, Rotuma and Gilbert Islands. This pidgin was further developed in New Caledonia and acted as the contact language used in interactions between the peoples of southern Vanuatu and European whalers, sandalwood and *bêche-de-mer* traders. His data suggest that several of the grammatical formatives shared by the Bislamic languages today were already in place in this earlier marine Pacific pidgin.

That scenario suggests that the ultimate origin of many of Bislamic's distinctive syntactic characteristics may lie in Austronesian languages not examined in this study, such as Pohnpeian, Kosrae, Gilbertese, Rotuma, Lifu and Fijian. Certainly that is a potential area of future investigation, but this study, nonetheless, focuses on a restricted set of languages spoken in Papua New Guinea, Vanuatu and the Solomon Islands, since it is the shared forms of these vernacular languages that allowed continuity, stabilisation and elaboration of the syntactic formatives of Keesing's Pacific pidgin. It is equally likely, then, that certain features present in the early Pacific pidgin were lost in Bislamic or maintained unevenly among the three modern languages due to conflict with shared Melanesian Austronesian features, and that Bislamic added features that were absent – or at least unproductive – in an earlier pidgin.

Rick Goulden  
Toronto  
October 1989

## ACKNOWLEDGEMENTS

Needless to say, this work would not have been possible without the support, advice and guidance of a number of friends and colleagues. In particular, I owe much to those Papua New Guineans who provided invaluable hospitality, friendship and time to my work in the field. They include the people of Kandoka, Karaiai, Pudêlîŋ and Kokopo villages, especially Benedict Solou, Maria Datima, Jakob Mua, Hendrik Sasalo Kunaŋ Clara Iona, Giranda Ensi, Pius Bogi, Paul Kalolo, Njauma Geti, Chris Aipuli and Talania. Thanks also to John Lynch of the University of Papua New Guinea for his support and to Terry Crowley of the University of the South Pacific for his friendship and guidance.

Dr John J. Chew, my advisor, contributed immeasurably to my linguistic training and to the thought behind this study. His insights and encouragement fuelled my efforts. Dr William J. Samarin was an inimitable guide through the world of pidgin and creole linguistics.

My committee members from the Linguistics and Anthropology Departments of the University of Toronto all deserve an encomium for their suggestions and encouragement: E.N. Burstynsky, J.J. Chew, D.R. Counts, M. Lambek, T.F.S. McFeat, S.B. Philpott and W.J. Samarin.

Renée Heyum at the Pacific Collection of the University of Hawai'i deserves recognition for her keen intelligence, for her kindness and for her generosity.

The Social Sciences and Humanities Research Council of Canada assisted in my upkeep during my PhD years by providing a Doctoral Fellowship, and I wish to thank them for their encouragement of education in Canada. Thankyou also to the Institute of Papua New Guinea Studies, to the Language Department of the University of Papua New Guinea and to the government of West New Britain Province for their support.

David and Dorothy Counts, Naomi McPherson, and Lynn Stewart all provided the invaluable support of dear friends and the stimulating conversation (in Tok Pisin and English) that taught me the relevance of my own linguistic interests to anthropology. *Rot bilong mi i no gat kil nau.* A giant bear hug to another dear friend, Nancy Vichert, who edited the thesis and made the illegible legible. I would also like to express my appreciation to Mrs J. Ezard for her thorough and painstaking reading and for her insightful and valuable suggestions.

Ellen Facey provided much needed data on Nguna and lent a supportive ear on the topic of comparative Austronesian linguistics. Her ability to produce implosives and kill crocodiles with a skirt are impressive.

My parents, Graham and Eleanor Goulden, provided not only financial support through my academic career, but contributed immeasurably to my scholastic endeavours through their love and encouragement. I am proud to be their son.

Lastly, I wish to dedicate this study to Bil Thurston. Bil introduced me to linguistic anthropology and to the wonderful people of New Britain, and he trained me to see with a critical eye. His unfailing guidance, care and patience has helped me through it all unscathed. Without Bil I might have gained financial security as an accountant, librarian or waiter. Although adventure has its financial drawbacks, it is as priceless as true friendship. With both, I'm a rich and lucky man.

*Buk lê led okên aled kan nin ue tugunae da.*



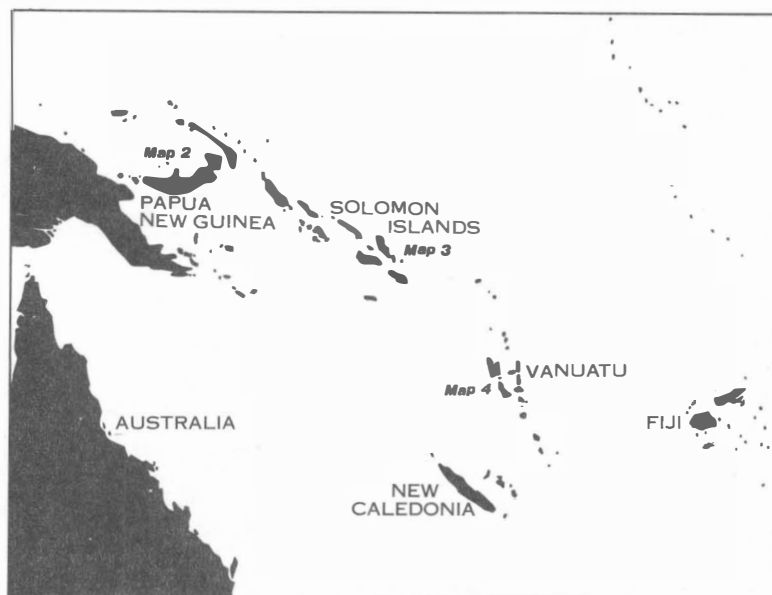
## ABBREVIATIONS

adj	adjective	NAN	Non-Austronesian
AMBR	Ambrym	NASA	Nasariana
AN	Austronesian	neg	negative
ant	anterior marker	NGGE	Nggela
AROS	Arosi	NGP	New Guinea Pidgin
BALA	Balawaia	NGUN	Nguna
BISL	Bislama	nm	noun marker
BUGO	Bugotu	nom	nominaliser
c	connective	NP	noun phrase
caus	cause	npst	non-past
coll	collective	O	object
comp	completive	p	plural
CPE	Chinese Pidgin English	PAAM	Paamese
d	dual	PEO	Proto-Eastern Oceanic
dis	distant irrealis	PIJN	Pijin
dur	durative	pl	plural marker
fut	future	POC	Proto-Oceanic
hab	habitual	PORT	Port Sandwich
HMOT	Hiri Motu	poss	possessive
imm	immediate irrealis	PPF	Plantation Pidgin Fijian
inst	instrumental	prep	preposition
int	intentional	pres	present
irr	irrealis	Pro	pronoun
KABA	Kabana	prog	progressive
KILE	Kilenge	pros	prospective irrealis
KWAI	Kwaio	pst	past tense
LENA	Lenakel	r	relator; realis
loc	locative	rd	reduplication
LONG	Longgu	remtr	remote transitive
MANA	Manam	rep	repetition
MNAN	Melanesian Austronesian	s	singular
MPE	Melanesian Pidgin English	S	subject
n	inclusive	seq	sequence
N	noun	sg	singular marker
NAKA	Nakanai	sm	subject marker
NAMB	Big Nambas	sr	subject reference

x

t	trial
TANG	Tangoan
TANN	Tanna
TIGA	Tigak
TOLA	Tolai
TP	Tok Pisin
tr	transitive
v	verb

VATU	Vaturanga
vm	verb marker
VP	verb phrase
x	exclusive
1	first person
2	second person
3	third person



MAP 1: MELANESIA



MAP 2: PAPUA NEW GUINEA



MAP 3: SOLOMON ISLANDS



MAP 4: VANUATU

## CHAPTER 1

### INTRODUCTION

#### 1.1 THE NATURE OF THE AREAL SUBSTRATUM

Numerous linguists have noted the similarity between Tok Pisin (also known as New Guinea Pidgin (NGP) or simply Pidgin) and Melanesian Austronesian languages (henceforth MNAN)<sup>1</sup>. Friederici, for example, wrote in 1911:

[Tok Pisin's] framework and main constituents are English and its grammar a mixture of English and Melanesian, so its character is 'kanaka'<sup>[2]</sup>, and its vocabulary is basically English... (in McDonald 1977:6)

Over sixty years later, Wurm suggests:

Pidgin is, in several features of its structure, closer to Austronesian languages than to English, although differing in some points of its structure from Austronesian languages as well. (1977b:512)

In spite of such observations, the extent to which MNAN languages influenced the genesis and development of Tok Pisin has rarely been examined in detail, due in part to a number of problems associated with substratum theory (see section 3.3) and in part to the substantial data base required to pursue such an investigation:

Unfortunately, the early contact jargon was spoken by learners from many linguistic backgrounds and the task of providing contrastive data is thus considerable. (Mühlhäusler 1980a:39)

Most linguists would agree that substratum influence is difficult, if not impossible, to demonstrate when a number of different substrate languages are involved. Such is the case with Tok Pisin, whose history involves contact with a large number of possible substrate MNAN languages which are, furthermore, very diverse in structure. Sankoff, speaking of studies of convergence among Indic languages, states:

Pidgin languages are more difficult to handle in this comparative perspective because the parent languages are more difficult to identify, given the great linguistic diversity in most areas where pidgins have developed. (1977:121)

The usual approach in examining substratum influence in Tok Pisin is to focus on a single substratum language, namely Tolai (Kuanua), spoken around Rabaul, the capital of East New Britain

Province, where pidginised English first entered the New Guinea region. Tolai has long been held to have had a substantial influence on Tok Pisin, especially since the majority of non-English lexical items in Tok Pisin can be traced to Tolai or related languages of the Tolai-Patpatar subfamily. Fry suggests that Tok Pisin:

developed much of its structure through use in the Rabaul region during the early period of the German administration, and Kuanua has probably had more influence on Pidgin than any other single New Guinea language...The structure of Pidgin is basically Austronesian, and Pidgin would appear to be as close in structure to Kuanua as to any other Austronesian language. (1977:869)

Similarly, Sankoff says:

In many ways, particularly in terms of semantics, Tok Pisin's structures parallel those of the Austronesian languages of the area [around Rabaul]. (1977:119)

Although Mühlhäusler (1978) shows that Tok Pisin had already developed many of its modern characteristics before it even reached New Guinea, he later suggests that Tolai-Patpatar languages may have had an impact on Tok Pisin while it was still a plantation pidgin in Samoa, and:

Rabaul continued to be the most important single centre of NGP's spread well into its expansion stage, and...Tolai can be regarded as representative of a large number of Melanesian languages. Thus, the demonstration of shared lexical structures in Tolai and NGP must be regarded as being representative of the role of Melanesian languages in NGP's expansion rather than an observationally adequate account of this part of NGP's history. (1979:258)

Most of the features of Tok Pisin to be discussed in this study are also found in the related Bislamic languages – Pijin (or Neo-Solomonic), spoken in the Solomon Islands, and Bislama, spoken in Vanuatu. This suggests an earlier origin than the advent of pidginised English in New Guinea, a point made also by Keesing (1988a:3).

Mosel (1980) seeks to show which characteristics of Tok Pisin possibly reflect Tolai-Patpatar substratum influence. Although she finds a number of similarities between Tolai and Tok Pisin, Mosel demonstrates also that the two languages differ in many respects and warns:

It can only be stated that substratum influence 'may be possible', or that the structure of the substratum language 'may have reinforced' some phenomenon of Tok Pisin. This precaution is necessary, because both Tolai and Tok Pisin often show features that in the case of Tok Pisin can also be regarded as universals of pidgins...Other features, e.g. the use of a predicate marker, are also shared by ancient Bichelamar and thus are to be interpreted as common Melanesian, if they cannot be ascribed to pidgin universals. (1980:7-8)

Any comparison that focuses on a single substratum language such as Tolai will naturally fail to find an identical match between that language and Tok Pisin. A large number of substrate languages were spoken by the people involved in the historical development of Tok Pisin, and these MNAN languages show considerable diversity in word order, morphological complexity and so on.

Furthermore, a single substrate language cannot explain the very similar grammars of all three Bislamic languages (Tok Pisin, Bislama and Pijin) and their relationships to MNAN languages in general. A discussion of substratum in Tok Pisin requires a different approach, and two clues are provided in the quotes above by Sankoff and Mosel: 'semantics' and 'common Melanesian'.

Mühlhäusler notes the semantic relationship between Tok Pisin and MNAN languages:

A last source of the stabilisation of semantic information are widely shared semantic conventions found in the languages of Papua New Guinea. Though the full extent of the influence of "common Papuan-Melanesian core" semantics (cf. McElhanon 1975:56) remains to be determined, it is evident that it accounts for a significant proportion of the semantic information added to the semantically impoverished and vague lexical bases of English origin.

Laycock (1970b:1127-76) discusses a number of properties of lexical semantics shared by languages in the area of Papua New Guinea, as does Holmer (1966) for the wider area of the Pacific Ocean. Though both are only preliminary studies, they are important for an understanding of NGP's lexical semantics, particularly those cases where lexical bases are related phonologically to English but differ in their semantic properties.

...These examples, to which numerous others could be added, demonstrate that substratum influences are an important source of semantic information found with NGP lexical items. Their relative importance *vis-à-vis* other influences of the kind discussed by Huttar (1975:684-95) remains to be determined. (1979:216-217)

Although Mühlhäusler is discussing the semantics of lexical items, his comments can be applied also to syntax, since the development of Tok Pisin syntax is dependent on the lexical resources of pidginised English. This study seeks to demonstrate that, in spite of the apparent syntactic diversity of the MNAN substrate languages, there is a common semantic base underlying much MNAN syntax. Thus the presence or absence of specific morphemes, the ordering of constituents in phrases and sentences, and the phonological shape of syntactic forms may vary from language to language, but where the majority of MNAN languages mark the same semantic relationships, these are encoded in Tok Pisin syntax as well.

When most MNAN languages agree in the way a given syntactic category or semantic feature is realised at the lexical level, Tok Pisin often has a calque of that structure. When the marking of a semantic relationship is widespread among the substrate languages, but shows little agreement in syntactic realisation cross-linguistically, the category occurs in Tok Pisin, but its structure obviously cannot be calqued, and it requires another explanation. In other words, although the outer form of Tok Pisin, namely the phonological shape of the majority of its lexical items, is English-derived, the bulk of the inner form is derived from the semantic core shared by most or at least many MNAN languages as part of an areal substratum. Using Grace's (1981a) terms, the content form (what is said in Tok Pisin) is shared by MNAN languages, whereas the lexifier (the words used to express it) is English-derived.

The history of the relationship between Tok Pisin and the contact languages involved in its creation is a complex one. To fully understand the genesis and development of Tok Pisin, it is necessary to consider more than the simplification of English, a prevalent approach which emphasises the English lexifier to the detriment of the MNAN content. It is necessary also to include the internal development of the language, the process whereby the internal resources of a pidgin which has become stable are called upon in the expansion of that pidgin into a competent and creative communicative system. Mühlhäusler (1979) has carefully documented this process for Tok Pisin. Substratum plays an important role between the initial contact jargon (involving, *inter alia*, 'simplification' of English) and the expansion of a stable pidgin by drawing on its internal resources. First, interference from substrate languages influences the outcome of the second-language learning process; and second, structures in substrate languages act as models for the internal resources of the stable pidgin which become productive during the expansion period. Since the spread of a pidgin involves repeated learning, substratum influence continues to affect the outcome, although once the pidgin is stabilised, a norm develops which restricts the degree to which substratum influence can manifest itself. This study seeks to document substratum influence in the history of Tok Pisin more fully than has heretofore been accomplished, so that, when the other approaches to the problem of the origins of Tok Pisin are also considered, a more holistic theory will be possible regarding the history of this language.

Chapter 2 of this study provides background information on Tok Pisin: its current sociolinguistic position, its history and its relationship to other Pacific English-based pidgins and creoles. Chapter 3 describes the three-part model (partial learning, substratum calquing and internal productivity) employed in this work to explain the history and development of Tok Pisin. Chapters 4, 5, 6 and 7 compare a number of phonological, syntactic and semantic features shared by MNAN languages both among themselves and with Tok Pisin. Chapter 8 draws the various aspects of the discussion together.

## 1.2 THE DATA BASE

Data from a variety of MNAN languages are used for comparative purposes in this study: the names of the languages, the places where they are spoken and the sources of the data used here are provided in Appendix I. The original choice of languages depended greatly upon the quality and quantity of the descriptions then available. Fortunately several reliable grammars have been published in recent years, making possible a comparative study of the type proposed here. Older grammars tend to have gaps in their descriptions and have not benefited from recent developments in linguistic theory, especially with regard to semantics and such topics as tense and aspect. Data from such older grammars may undergo some reinterpretation in this work, based on my own knowledge of Austronesian languages and Austronesian linguistics. My analysis may be shown to be inaccurate if and when more demanding fieldwork is done on these languages; until then, it is hoped that my interpretation is not so far off the mark as to negate its applicability to the comparison involved here.

Many of the individual languages examined in the comparison may not have played a direct role in the genesis of Tok Pisin, in that speakers of those languages, especially the Papua New Guinean languages, were not involved in the earliest trade or plantation situations when English was first



pidginised. This does not, however, detract from the purpose of the comparison, which seeks to demonstrate that features of Tok Pisin can be found in structurally diverse and geographically distant MNAN languages; indeed, it highlights the common MNAN content influencing the direction taken by jargon English in its development into a stable pidgin.

Although it cannot always be ascertained from the historical documentation available which of the languages of the Solomon Islands and Vanuatu were among those in direct contact with English at the outset, the likelihood of their involvement in the genesis of Tok Pisin is, nonetheless, greater than in the case of New Guinea languages. The first labourers taken to Queensland and Samoa, from Vanuatu and the Solomon Islands, were instrumental in the genesis of a stable form of pidginised English which they passed on to the New Guineans. Because the influence of Vanuatu and Solomon Islands languages in particular was most salient in the initial stages of development in the trade and plantation periods, eleven languages of Vanuatu and seven languages of the Solomon Islands are examined in this study, while the languages of Papua New Guinea are represented by only six languages. More evidence involving Solomon Islands languages can be found in Keesing's works (see references). Following Keesing's (1988a) argumentation, the members of the Eastern Oceanic Austronesian languages of Vanuatu and the Solomon Islands were instrumental in the formation of Melanesian Pidgin English (MPE), while the languages of Papua New Guinea, such as Tolai (often taken as the principal substratum of Tok Pisin) not only fall outside this family, but had little influence on the creation of MPE, from which Tok Pisin is derived. Nonetheless, Papua New Guinean languages are included in this study to demonstrate that, although they are not members of the Eastern Oceanic subgroup, they often share patterns found in the latter. Even if such languages were not involved directly as substratum in the creation of MPE, these similarities increased the learnability of MPE by Papua New Guineans, and thus facilitated the acceptance and spread of MPE.

As will be seen in section 3.3, it is frequently the case that the description of the structure of one language reflects those of neighbouring languages. Although the speakers of a given language used here for comparative purposes may not have been part of the contact situation, it is possible that their neighbours were participants, and so the sample language used here may reflect the influence of the real participants on the formation of Tok Pisin.

Data on Tok Pisin and on the MNAN languages of the northern coast of West New Britain, particularly Lusi and occasionally Kilenge, come from the author's work on those languages. Fieldwork was conducted in West New Britain in 1978, 1981, 1982 and 1988 for a total of approximately 18 months. Although the focus of my fieldwork was to gather data on Lusi and related languages, fluency in Tok Pisin was quickly acquired in the field and maintained through constant use both in the field with native speakers and at home with a number of Tok Pisin-speaking colleagues. In the field I recorded language-learning sessions, stories, public speeches and conversations in both Lusi and Tok Pisin involving men and women of all ages.

Tok Pisin is spoken fluently by all Lusi except a very few old people who understand the language but prefer to use the vernacular, especially in situations such as story-telling which require stylistic competence. Nonetheless, even the oldest members of Lusi society command a certain amount of conversational Tok Pisin. In coastal north-western New Britain, most adults and virtually all young people and children have acquired Tok Pisin concurrently with their vernaculars, although the degree

of fluency and familiarity with Tok Pisin decreases in the interior. Some Lusi, who left their villages as teenagers in order to attend high school or college outside the Lusi-speaking area and who then gained employment away from home, have lost their spoken command of the vernacular, but they remain exceptional. In all vernacular languages of the area, Tok Pisin has also been a major source of lexical borrowing.

Although this must remain a subjective opinion until more fieldwork has been conducted on the topic, it is fairly clear that the Lusi speak a dialect of Tok Pisin that is distinctly New Britain. This impression is founded on several observations:

- (1) While in New Britain, I had no problems understanding or making myself understood to various New Britainers, including people from eastern New Britain such as Nakanai speakers or Tolai speakers. Yet I found a number of people from the mainland of Papua New Guinea, especially Highlanders, difficult to understand, even those resident in New Britain. Residents of Morobe Province on the mainland however, spoke a version of Tok Pisin close to my own. Most of the differences involve pronunciation or lexicon.
- (2) On several occasions while I was in Lae or Port Moresby on the mainland, Papua New Guineans remarked that I spoke like someone from New Britain, one man even exclaiming that I sounded like a Tolai – not only was my form of Tok Pisin distinctive, but some individuals could even recognise it as a New Britain dialect. This was especially comical to them, since few foreigners residing in Papua New Guinea speak fluent, accent-free Tok Pisin, let alone a rural dialect (see section 2.2).
- (3) I find instances where the pronunciation, lexicon and syntax in the Tok Pisin data of writers who have worked elsewhere than in New Britain differ slightly from my own Tok Pisin. I have also noticed that the Tok Pisin of colleagues in North America varies depending upon the area of Papua New Guinea where they learned the language. Upon meeting Roy Wagner who worked in New Ireland Province, I was delighted to hear him speak a dialect similar to mine. I have also enjoyed conversations on the topic of Tok Pisin dialects with Dan Jorgensen, who speaks the Tok Pisin of Sandaun Province. It is hoped that further fieldwork will establish more concretely the dialect variation to be found in New Britain Tok Pisin. Suffice to say at this point that the variety of Tok Pisin used here is that of West New Britain, and it may therefore differ in minor detail from that spoken elsewhere in Papua New Guinea. Where relevant in this study, I will try to make more explicit the details of such differences.

## CHAPTER 2

### TOK PISIN: PAST AND PRESENT

#### 2.1 TOK PISIN: WHAT'S IN A NAME?

Tok Pisin is known by a number of different names, including Neo-Melanesian, New Guinea Pidgin, Melanesian Pidgin English, Tok Boi or simply Pidgin. The name Tok Pisin is favoured here for a number of reasons, as outlined in Woolford (1979:1) and expanded upon below:

(1) Tok Pisin is the most common term used by its speakers, and it has become increasingly more common in the literature (as in Sankoff 1977; Lattey 1979; Woolford 1979; Mosel 1980; Mühlhäusler 1980a, 1980b, 1986; Dutton and Thomas 1985). According to Mühlhäusler, Tok Pisin 'was declared the official name by the Government of Papua New Guinea in July 1981' (1983b:93).

(2) Originally the word *boi* referred to a labourer, and Tok Boi made reference to Tok Pisin as the language used by Papua New Guineans working together on plantations. Tok Pisin, however, is not simply a 'work language' and for this reason the label is inappropriate. Although the term Tok Boi is rarely heard today, it was once used by expatriates (foreigners, usually white, residing in Papua New Guinea) with all the patronising implications that 'boy' has when used to refer to Blacks elsewhere in the world.

(3) Since there are a number of different pidginised or creolised forms of English spoken in Melanesia, the names Neo-Melanesian and Melanesian Pidgin English have wider application than has the specific name Tok Pisin. Such terms therefore apply more appropriately to the historical antecedent to Tok Pisin and to related languages such as Bislama and Pijin (cf. Clark 1979:7). Melanesian Pidgin English is used here in reference to the antecedent of these three modern Bislamic languages.

(4) With regard to the term New Guinea Pidgin, Tok Pisin is spoken in Papua as well as in New Guinea and hence this term is too geographically specific. The historical roots of Tok Pisin are deeper in New Guinea than in Papua, but today even Hiri Motu speakers in Papua are learning Tok Pisin (Mühlhäusler 1979:2).

(5) The name Tok Pisin obscures the notion of 'pidgin' made obvious by terms such as Melanesian Pidgin English, New Guinea Pidgin, or simply Pidgin. To most Papua New Guineans, the name Tok Pisin is rarely associated with its English etymon 'talk pidgin', but is more commonly interpreted as 'bird language'. *pisin* comes from English 'pigeon', but has taken the generic meaning 'bird' (the word for 'pigeon' or 'dove' is *balus*, from Tolai). Even English speakers frequently confuse the homophones 'pigeon' and 'pidgin', the latter being an esoteric technical term.

The Lusi interpretation of the name Tok Pisin is worth mentioning. Some Lusi simply say that spoken English sounds like the chatter of birds. More commonly, however, the name fits with Lusi mythology which associates birdsong with the language of dead spirits (see, for example, Counts 1982:179). It is widely believed that Caucasians with their ghost-like white skin are spirits of villagers returned from the land of the dead to check up on surviving kin. A number of expatriate behaviours unwittingly corroborate this belief. For instance, white settlers often delineate property boundaries with a border of colourful crotons. The various peoples of north-western New Britain plant crotons and cordylines at the foot and head of a grave to impose a boundary between the living and the dead (Counts 1982:190), and one sometimes sees these plants surrounding the whole graveyard. Furthermore, the Lusi do not whistle musical tunes, as Europeans do, because this would attract dead spirits who communicate in whistle-like birdsong. Other evidence has been pointed out to me, such as the coolness and smell of Caucasian skin – a genetic predisposition to sweat in a hot tropical climate, but, as far as the Lusi are concerned, an obvious similarity to corpses. One can well imagine, then, the reaction of the New Britainer to the pale-coloured, clammy-skinned, odiferous Caucasian merrily whistling a tune in a house which is surrounded by crotons. The interpretation of *Tok Pisin* as ‘bird language’, the language of spirits, makes infinite sense in this cultural milieu (see also Romaine (1988:110) on the symbolism of birds).

Although the choice of Tok Pisin as the language name may be seen as a propagation of this folk interpretation, it nonetheless avoids the Western associations with the term ‘pidgin’ which are equally problematic, both at the level of the layman and for linguists. Woolford (1979:1) suggests that the term ‘pidgin’ should be avoided because of lay prejudice, but even in linguistics the study of pidgins has only recently become a respectable endeavour. In the case of Tok Pisin, Wurm points out :

Pidgin was regarded by critics as a revolting, disgusting, debased corruption of English, full of insulting words, and sounding quite ridiculous to listeners. (1977a:541).

A cursory reading of Sayer (1944) shows how much pidgins were held in contempt even by linguists. Besides his heavy-handed approach to pidgins as comic entities, Sayer makes it abundantly clear that, although pidgins may have an important communicative function across language barriers, they are nonetheless ‘quaint and crude macaronic jargon[s]’ (1944:1) that reflect inferior language skills and therefore inferior intellects: ‘Give the native time to ponder and think – his brain works slower than yours’ (1944:25). Ironically, Sayer’s brand of Tok Pisin is clearly Tok Masta (see section 2.2), revealing his own ignorance of the complexity and expressive nature of the pidgins he discusses, which, he states, ‘have no grammar’ (1944:2,5).

Within the study of linguistics, the status of Tok Pisin as a pidgin is subject to debate. According to the sociolinguistic criterion that a pidgin has no native speakers, Tok Pisin can be seen as both a pidgin and a creole, in that it is still being learned in the more remote areas of Papua New Guinea as a foreign language by adults, and it has a growing number of monolingual speakers, especially in the urban centres. Thus it is a foreign language (a pidgin) for some and a mother tongue (a creole) for others.

Another problem is how to define Tok Pisin as spoken in New Britain and many other areas of New Guinea where it is acquired by toddlers at the same time as they are acquiring a vernacular. Most inhabitants of north-western New Britain acquire Tok Pisin concurrently with a vernacular,

except the very old (those who remember the German administration) who probably learned Tok Pisin as a foreign language in adulthood. The terms 'first language' and 'native language' are problematic either in assuming a serial acquisition, that is, the first language (among several) that a child acquires, or in giving primacy to the vernacular, that is, considering other languages to be non-native. The vernacular still plays an important role in Melanesian notions of cultural identity, as reflected in the concept of *wantok* 'one who speaks the same language', and thus has primacy over a lingua franca, but Tok Pisin has become increasingly important as a language defining *wantoks*.

In its widest meaning [*wantok*] refers to someone with whom one can speak NGP, frequently with the implication that *wantoks* share interests and mutual obligations. Solidarity rather than race or origin determine the appropriateness of the use of *wantok*. Members of the same first language background are referred to as *wantokples* rather than *wantok*. (Mühlhäusler 1979:5)

In spite of these difficulties of definition, linguists prefer to regard Tok Pisin as a pidgin because the number of monolingual Tok Pisin speakers is still small relative to the number of bi- or multilingual Tok Pisin speakers. The sociolinguistic definition of a pidgin as a non-native language is usually accompanied by linguistic, that is structural, criteria as well.

Structural criteria which define pidgins as 'languages with highly simplified phonological, syntactic and semantic information' (Woolford 1979:4) also run into problems in defining the status of Tok Pisin because:

It shows agreement with features of other pidgin languages, i.e. its reduced lexicon is supplemented by a set of rules, i.e. increased grammaticalisation, which permits the greatest possible use to be made of its restricted lexical inventory. At the same time, Pidgin is much more elaborate and richer than most other pidgin languages, and in this is fully comparable to a creole language, though the extent of its creolisation is quite minor at this stage. (Wurm 1977b:530)

For this reason Tok Pisin has been called an 'elaborated pidgin' (Andersen 1983:2) or an 'expanded pidgin' (Mühlhäusler 1979:58).

Because of the inherent terminological problems with the concepts 'pidgin' and 'creole', it would be more fruitful to focus on the processes of pidginisation and creolisation than to attempt to define the outcomes of these processes, namely pidgins and creoles. The history of Tok Pisin adequately demonstrates that the language is the result of the pidginisation of English. It is also clear that Tok Pisin has subsequently undergone expansion and elaboration similar to that of creolisation without extensively replacing vernacular languages. Inasmuch as its current status as a product of such processes is subject to definitional debate (by what criteria is Tok Pisin a pidgin?) and because of the negative associations of the term 'pidgin' to both laymen and to some linguists even today, it is best to avoid the pidgin label in the terms 'New Guinea Pidgin' and 'Melanesian Pidgin English', and to treat it simply as a language with its own name, 'Tok Pisin'. Few native speakers of Tok Pisin are aware of the sound changes that render English 'pidgin' as Tok Pisin *pisin*, nor do most English speakers make the connection between Tok Pisin and 'talk pidgin'.

## 2.2 TOK PISIN TODAY

Tok Pisin is the single most important lingua franca of Papua New Guinea. Spoken by 'some 750,000 to 1,000,000 people as a second language and in about 20,000 households as a first language' (Mühlhäusler 1983b:93), it is still spreading. In a country of over 750 different languages, such a lingua franca plays an important role in daily communication, being used in a great variety of situations, from market haggling to parliamentary debate. As a lingua franca its use is primarily centred on interindigenous communication, much more so than on communication between foreigners and Papua New Guineans. Tok Pisin is also a written medium, boasting several newspapers (e.g. *Wantok* and the *Lae Garamut*) and is used in religious publications, including the *New Testament*, in government publications, in personal letters and in creative writing (cf. Laycock 1977, 1985a). During the Second World War, Tok Pisin was used for propaganda purposes in pamphlets dropped over Papua New Guinea by both the Japanese and the Allied Forces (Mühlhäusler 1979:7). Tok Pisin is also the broadcast language for a number of provincial radio stations (cf. Siegel 1985).

Mention has already been made of regional variation in Tok Pisin, noted as early as 1911 by Friederici (in McDonald 1977:95). Mühlhäusler (1977, 1979, 1985b) examines the topic in more detail than do previous writers, focusing in particular on the social circumstances leading to regional variation. As yet, however, no detailed comparative work on Tok Pisin dialects has been published, although grammars and course materials have been produced on specific dialects, namely Madang Tok Pisin (Mihalic 1971), Coastal and Lowlands Tok Pisin (Laycock 1970), and Highlands Tok Pisin (Wurm 1971).

Cross-cutting regional variation is the classification of social varieties of Tok Pisin – Bush Tok Pisin, Rural Tok Pisin, Urban Tok Pisin and Tok Masta (cf. Mühlhäusler 1979, 1985b). Bush Tok Pisin is spoken in remote areas of the highlands and in the interior of the Papua New Guinea mainland (areas which lack the long history of contact of Rural and Urban Tok Pisin) and:

is characterised by a deviant sound system, simple syntax and limited vocabulary. This goes hand in hand with poor understanding and misinterpretation of the pidgin spoken by more fluent speakers. (Mühlhäusler 1979:149)

As development continues and contact increases, the idiosyncratic nature of these bush pidgins tends to diminish, while standardisation in the direction of Rural Tok Pisin increases (Salisbury 1967:46).

Rural Tok Pisin refers to a variety of Tok Pisin which is widely spoken in villages located in those areas of Papua New Guinea where there has been prolonged contact with members of other ethnic groups with whom Tok Pisin is the shared language of communication. The term Rural Tok Pisin:

is applied to what may be called basilectal NGP, a fluent but unsophisticated variety, influenced by Melanesian rather than English grammar, which has become widely accepted as providing the norms for 'good Pidgin'. (Mühlhäusler 1979:151-2)

Villagers along the coast of New Britain commonly speak Rural Tok Pisin, which they use in their almost daily contacts with members of other language groups in the towns or in nearby markets, missions and patrol posts. It is also used in communication with occasional visitors to the village, such as missionaries and administrative officials (health and agricultural officers, patrol officers and the like), with people from nearby villages who speak other vernacular languages, and with

expatriates on plantations or elsewhere. In these communities one often finds that most villagers know Tok Pisin, both men and women, young and old. This is the variety of Tok Pisin examined in this study.

Urban Tok Pisin is spoken by the urban dwellers in such large centres as Rabaul, Lae and Port Moresby. Urban dwellers have greater access to the English language than their bush or rural compatriots since the majority of English-speaking expatriates live and work in towns. In addition, well-educated and professional Papua New Guineans often speak Urban Tok Pisin, even though their employment as teachers, doctors or government officials may take them to rural or bush settings. Urban Tok Pisin is an anglicised variety of Tok Pisin, marked by the incorporation of English pronunciation, syntax and lexicon, often in an unsystematic and idiosyncratic way. It may be understood by other English-speaking Papua New Guineans, but is seldom comprehensible to the rural or bush dwellers, and so meets with much resistance when used in newspapers or radio broadcasts. Speakers of Urban Tok Pisin with rural backgrounds often have command of Rural Tok Pisin and can switch when conversing with rural dwellers such as visitors from their home villages.

Mühlhäusler describes the variety of Tok Pisin called Tok Masta as:

the attempts by a large proportion of the expatriate community resident in Papua New Guinea to speak NGP, which represents a mixture of unsystematically 'simplified' English and certain randomly acquired grammatical and lexical properties of NGP. (1979:19)

According to Laycock, however:

The sociolect identified by Mühlhäusler (1975) as Tok Masta is also virtually dead in present-day Papua New Guinea. Tok Masta was the fluent but anglicised variety of Tok Pisin spoken by long-resident administrators, agricultural officers, and businessmen – a group which has largely departed from the country. In place of this old Tok Masta one can find a superficially similar variety spoken by the new generation of expatriate advisers and businessmen to unskilled labour lines, and in rural communities; but, as this variety no longer carries any prestige, is unsupported by a white power structure (Sankoff 1976b), and, in addition, lacks the fluency and self-satisfaction of Tok Masta, it is more readily characterised as bad Tok Pisin. (1985b:667)

Given the rapid spread of English throughout Papua New Guinea in recent years, it has become less necessary for the few expatriates remaining in the country to learn Tok Pisin. The result, as Laycock points out, has been a decrease in the use of Tok Masta. New arrivals tend today to learn Tok Pisin as a different language, not as an inferior form of English, although the end result may be bad Tok Pisin.

## 2.3 TOK PISIN: HISTORICAL SETTING

Linguists interested in tracing the development of Pacific pidgins from their earliest forms to their modern structures are fortunate to have available several analyses of these languages written soon after their stabilisation. The data provided by Schuchardt (1883, 1889 in Gilbert 1980) on *Melaneso-*

*Englisches* and by Churchill (1911) on 'Beach-la-Mar' have provided linguists not only with material on the structure of these early forms of Pacific pidgins, but also with information regarding their social and historical setting. As a result of Schuchardt's and Churchill's pioneering efforts, the history of Tok Pisin for the past 100 years is much more clearly understood than is the case for those languages around the world whose creation through pidginisation and creolisation has passed unrecorded. The period before the late 1800s remains vague, however, as descriptions of the incipient pidgins are few and more impressionistic than analytic.

The following discussion of the history of Tok Pisin is by no means a full sociohistorical account, but, following Clark's (1979) and Keesing's (1988a) research on the topic, it is meant to provide a scenario that can be readily applied to the linguistic discussion in subsequent chapters.

The ancestral language of Tok Pisin, Pijin and Bislama came into being in the 19th century when commercial interests began to bring Europeans into Melanesia, first for whales, then for sandalwood and *bêche-de-mer*, and finally for plantation labourers. Clark distinguishes two important periods in the history of Melanesian pidgins:

the period before 1865, which was dominated by whaling and other purely extractive trades, and that from 1865 to 1900, when plantation agriculture and labour migration became important. (1979:5)

After 1900, when labourers on plantations in Queensland, Samoa and New Caledonia returned to their home islands speaking pidginised English, the pidgin began to expand and develop into the distinct Bislamic languages – Tok Pisin, Pijin and Bislama.

### 2.3.1 THE PERIOD BEFORE 1865

The result of the first contacts of Europeans with Melanesians was the formulation of various trade jargons, subsumed by some authors under a single label, such as 'Sandalwood English' or 'Beach-la-Mar', after the trades from which they arose.

Among the first European visitors to the scattered islands of Melanesia were whalers. Although whaling was largely concentrated in Polynesia, Europeans came into contact with Melanesians as the result of whaling grounds being in northern Melanesia and along shipping routes between Sydney and Southeast Asia (India, Indonesia and China) which passed by the Solomon Islands and New Ireland. Ships' crews occasionally came ashore in search of food, water and firewood, but these visits were generally brief, their influence on the development of trade jargons being slight in most places. The contact and concomitant need for a lingua franca were greater, however, in locales which became regular stops because the inhabitants proved friendly and because there were good anchorages and supplies of food and water, as was the case with St. George's Channel between New Ireland and New Britain (Moore 1984). In some cases, islanders were taken on as ships' crew, joining an already polyglot community of sailors including native speakers of English, other Europeans, Filipinos, Malays and Pacific Islanders. Keesing argues that contacts in the Carolines, the Gilbert Islands, Rotuma and throughout Polynesia resulted in a more widespread knowledge of pidginised English than has been granted for this early period:



I believe, on the basis of the fragmentary evidence available, that a crucial phase in the formation of a Pacific jargon from which pidgin emerged took place in the 1840s as whaling and trading ships began to frequent the islands of the central Pacific.

The most likely settings for this stage in the expansion of a developing Pacific lingua franca appear on the basis of my own research to date to have been a series of interlinked island groups, principally Pohnpei (Ponape) and Kosrae (Kusaie) in the Carolines, the Gilbert Islands, and Rotuma, which were favored venues for whalers, traders, beachcombers, and deserters. These were centers where Islanders quickly became skilled dealers in produce, water, wood, turtle shell, *bêche-de-mer*, and sex, and enthusiastic consumers of liquor, tobacco, and trade goods. From these islands (along with Hawaii, Tahiti, and other Polynesian islands) emanated a steady stream of crew members for the whaling and trading vessels. (1988a:15)

In Melanesia, the sandalwood and *bêche-de-mer* trades were more influential in the development of trade jargons than was whaling. Both sandalwood and *bêche-de-mer* fetched high prices in China. The discovery of sandalwood in southern Melanesia in the 1840s resulted in a 'sandalwood rush' which had decimated most sandalwood tree stands by the 1860s. The harvesting of sandalwood trees required that Europeans spend some time on an island working with native populations:

This trade brought about the first sustained and widespread contact between Europeans and Melanesians. The latter were employed in cutting and carrying wood, as boats' crews, and as labourers at sandalwood 'stations'. The stations were centralised depots established from the mid-1840s, where wood was collected and stored to await the arrival of the next ship. (Clark 1979:36)

Around the same time, *bêche-de-mer* traders were setting up similar stations. *Bêche-de-mer* (*Holothuria edulis*), also known as trepang or sea cucumber, was gathered by indigenous populations, then cleaned, boiled and dried for shipment, a procedure requiring the establishment of shore settlements for storage and shipping. The name 'Bislama' is derived from the English 'beach-la-mar', derived by analogy from the French word *bêche-de-mer*.

As a safety measure, sandalwood and *bêche-de-mer* traders often avoided employing teams of co-linguals and did not hire labourers from villages near the stations. Consequently, as both trades often brought together numbers of labourers from different linguistic backgrounds, there grew a need for a lingua franca not only between the Europeans and the workers, but also among the workers themselves. Trade jargons arose to fill this need, and as a result a few individuals throughout southeastern Melanesia now knew some 'broken' English. The nature of these trade jargons, however, is currently under debate as a result of Keesing's (1988a) research. It has been suggested that these jargons were limited in structure and lexicon, and highly idiosyncratic, showing heavy first-language interference in phonology and probably a certain amount of mixing of lexical items from English and the vernacular languages (Clark 1979:34). Keesing, however, disputes this picture, suggesting:

An early but relatively developed Pacific lingua franca was...introduced from the central Pacific into southern Melanesia (the Loyalties, New Caledonia), where it underwent further expansion. This already quite grammatically developed pidgin provided a medium

for the commencement of the Labor Trade in the 1860s, in which Loyalty Islanders, Rotumans, Gilbertese, Fijians, Pohnpeians, and other already fluent (and in some cases native) speakers of pidgin acted as middlemen and brokers. (1988a:25)

According to Keesing's extensive research into this period, the widespread and well-developed pan-Pacific lingua franca was due, in large part, firstly to the extensive contacts between Europeans and islanders in the Carolines and elsewhere, and secondly to the large numbers of islanders taken on as ships' crew:

The total population of Islanders serving on European vessels was quite substantial enough to constitute a potent force of linguistic (and cultural) innovation and transmission, particularly insofar as they communicated with one another as well as with Europeans, and insofar as their wanderings to distant places gave them a prestige and sophistication, and a role as linguistic and cultural brokers, far beyond their absolute numbers. The population of beachcombers, deserters, and shore-based traders was again not great in absolute terms, but by the mid-nineteenth century they too constituted a potent force toward cultural and linguistic brokerage and intermediation. (1988a:22)

Keesing also rejects the belief that, during this period, there were numerous local versions of jargon:

Mühlhäusler (1986:39) comments that prior to 1860 there were "a number of unstable varieties of jargon English in various parts of the Pacific Ocean." But I see no strong evidence, linguistic or historical, supporting Mühlhäusler's contention that there were a multitude of different jargons. To be sure, speakers of different Pacific languages brought to an emerging lingua franca different phonological repertoires; and they probably bent the constructions of a developing jargon/pidgin to their own grammatical patterns...And no doubt local media of interlingual communication incorporated indigenous lexical items and usages, whether Gilbertese, Tahitian, Hawaiian, Pohnpeian, or other. But it seems to me, given the sort of evidence for an early shipboard lingua franca I have sketched, that we misrepresent the map of the mid-nineteenth century Pacific by, as it were, coloring in the widely scattered specks of land and leaving the ocean blank. (1988a:24)

In Melanesia, communication with the traders was presumably informed by any prior knowledge of the shipboard lingua franca which had developed throughout the Pacific region. It is also likely that the first sandalwood and *bêche-de-mer* stations were those where Europeans had previously made contact, had been pleased with the resources available, and were satisfied that the native populations were harmless. Furthermore, the Europeans working the stations were most likely already familiar with the lingua franca which developed in previous contacts with Pacific Islanders, and brought this knowledge into play in their interaction with the Melanesians. Hence the lingua franca that was used in the sandalwood and *bêche-de-mer* trades continued certain pre-existing linguistic traditions. Clark (1979: 37-38) shows that several modern Pacific and Australian pidgins and creoles do indeed share a number of linguistic features, and these were likely to have been present in the early Pacific jargon. Furthermore, the crews of the trade ships, like the whalers before them, came from various places, and many crew members may have had knowledge of other forms

of pidginised English as spoken in Africa or the Caribbean. Whalers, for instance, turned to the Pacific after expanding throughout the Atlantic region. If, as is quite probable, the form of English used on board the whalers had been transferred to crews on trade ships, then it is not surprising that certain features of pidgins the world over, such as terms like *savvy* 'know' and *piccaninny* 'child', may have entered these trade jargons from the 'worldwide nautical jargon' (Clark 1983:15) of the 18th century or earlier:

[European seamen themselves] collectively carried with them a set of linguistic and cultural expectations and strategies for "talking to natives", which has a long and complex history (only partly explored and documented), and which represented a cumulative interlinking of the various lingua francas of the Atlantic, the Caribbean, the China coast, and perhaps the Indian Ocean. (Keesing 1988a:23)

At the other end of the trade, the Chinese were also using an English-based contact language with the Europeans, and it is commonly believed that 'the contact-jargon which spread over the Pacific is related to Chinese Pidgin English, though the exact nature of this relationship is by no means clear' (Mühlhäusler 1979:56). Clark (1979:20) and Baker (1987) have shown that the Pacific pidgins and Chinese Pidgin English (CPE) have only a few features in common. Although the European traders may have transferred some CPE features into their contact jargon, the effect was minimal and it is doubtful that CPE was the immediate predecessor to the Pacific pidgins:

First attestations of 34 key features in CPE are compared with their earliest occurrence (if any) in more than a dozen Pacific varieties of Pidgin English (PPE). It is shown that none of the latter can possibly be a "direct descendant" of CPE. While four features exclusively shared by CPE and PPE indicate a modest degree of CPE influence on PPE, it is suggested that three key features of PPE, found only sporadically and/or tardily in CPE, provide evidence of some hitherto unsuspected influence of PPE on CPE. (Baker 1987:163)

Keesing's portrait of a relatively stable and homogeneous Pacific lingua franca during this period runs counter to Baker's view that there were several varieties of pidgin English in the Pacific and, furthermore, that 'New South Wales Pidgin English was a far more important influence on the PPE of [the islands of the southwest Pacific] than what has often been termed "South Sea Jargon"' (1987:163). Nonetheless, the contention that certain features are shared by Pacific Pidgin English varieties and that these influenced CPE suggests a deeper stability of the Pacific lingua franca than normally accepted, as in Mühlhäusler's suggestion:

It appears, however, that the linguistic traditions differed from place to place, and that the shared linguistic properties of Beach-la-Mar were of a very rudimentary nature. Chinese Pidgin English may have reinforced some of these linguistic characteristics. Linguistic records from various localities suggests that varieties of Jargon English arose in an *ad hoc* way rather than through conventional methods of language transmission. (1979:57)

While the exact nature of the linguistic situation in the Pacific during the mid-nineteenth century is under debate, it is clear that any lingua franca would not survive in Melanesia once the sandalwood and *bêche-de-mer* resources were depleted, the workers had returned to their villages, and contact

with Europeans and other Pacific islanders declined. It can be safely assumed, however, that MPE developed its own characteristics subsequent to this extractive trade period, dependent upon continued contact with Europeans. After the decline of the extractive trades in the 1860s, a new economic development (the development of plantation agriculture and labour migration) not only saved the lingua franca from extinction but provided the circumstances under which it evolved further and flourished:

A single early-Pidgin speech community, ship- and shore-based, solidly established within the zone of the Loyalties, Ile des Pins, New Caledonia coast, and southern New Hebrides islands of Erromanga, Tanna, and Aneityum, as well as in the central Pacific, provided, I suggest, a base for the further elaboration and stabilization of Pacific pidgin in the Labor Trade. (Keesing 1988a:34)

### 2.3.2 THE PERIOD FROM 1865-1900

From the mid 1860s until just after the turn of the century 40 years later, up to 100,000 Melanesians worked as indentured labourers on sugarcane fields and coconut plantations in Queensland, Fiji, New Caledonia and Samoa. Recruitment began in southern Melanesia (Loyalty Islands and Vanuatu) and over time worked its way northward to the Solomon Islands, so that the people of Vanuatu and the Solomon Islands were more or less continuously recruited during this period. New Guinea, however, did not become involved until after 1879 when Germany had established copra plantations in Samoa. Although labourers from Vanuatu and the Solomons were sent both to Queensland and to Samoa, most New Guineans went only to Samoa (Mühlhäusler 1978). For the first three years the southern Melanesians were numerically preponderant in Samoa, after which time the New Guinea recruits became the majority. When recruitment was abolished in all areas around the turn of the century, labourers who had not already finished their terms and returned to their home islands were repatriated, although a small number remained to settle in each of the territories involved in plantation labour.

The lingua franca which developed as a result of the sandalwood and *bêche-de-mer* trades provided the initial means of communication for the labourers and their overseers on the plantations. It is noteworthy that many of the traders from the sandalwood and *bêche-de-mer* period turned to recruiting after these trades died down; they and their ships' crews probably encouraged the continuity of the Pacific lingua franca into the plantation setting. As Keesing points out, by the end of the trade period contact had been extensive in New Caledonia and southern Vanuatu, and he lists a number of lexical items and 'grammatical constructions that are pervasive in all modern dialects of Melanesian Pidgin' and which occur in samples of speech in this region during this period of contact, providing 'crucially important glimpses of a developing pidgin' (1988a:32).

On the plantations, linguistically heterogenous labourers lived together for three years (the length of their contract) or longer, since some labourers renewed their contracts for two or more terms. With the constant use of pidgin English during the initial period, idiosyncrasies and variations in the original lingua franca were levelled and the norms for MPE were established. Within a decade (probably less), newcomers were exposed to a stabilised pidgin upon their arrival, and most had

already learned some of it from contact during the trading period, in the recruitment depots from returnees awaiting transport home, from continuing contacts with Europeans on their islands or from pidgin-speakers on ships while en route to the plantation.

The Samoan plantations were established fifteen years after the Queensland plantations, by which time an established and well-developed form of MPE had already developed in Queensland. The Vanuatu and Solomon Islanders in Samoa were instrumental in bringing this form of pidginised English to Samoa, having learned the evolving MPE during service in Queensland, on ships or on their home islands from returnees. The form of MPE spoken by the Vanuatu and Solomon Islanders must have been adopted in Samoa by the new arrivals from New Guinea who followed them. Consequently, Tok Pisin evolved from a Samoan plantation pidgin that had its roots in Queensland Canefields English, accounting in part for the similarities among Tok Pisin, Pijin and Bislama, as well as Australian forms of pidginised English (cf. Keesing 1988a:112-113). Keesing, noting the similarities to be found among the three Bislamic languages, and having established an earlier pan-Pacific lingua franca which acted as the basis for the pidgin used during the Labour Trade period, argues against Mühlhäusler's view of the separate development of Tok Pisin:

...many of the most important developments in the expansion and stabilization of pidgin took place *prior to* the separation of the regional dialects of Melanesian pidgin about a century ago, and hence these dialects have a fundamentally common grammar and lexicon...

My reading of the historical and linguistic evidence is that Mühlhäusler (1978, 1985a, 1986) and before him Salisbury (1967) have radically overestimated the separateness of the New Guinea Pidgin lineage from the pidgin of Queensland and the recruiting areas of the southwestern Pacific. I read the evidence as indicating that the pidgin spoken both on the German plantations in Samoa and in some parts of the Bismarck Archipelago as of the first half of the 1880s was essentially the same as that spoken in Queensland, the New Hebrides, and the Solomons: these areas were part of a single, dispersed speech community. Only in the latter 1880s – and only after Pacific pidgin had acquired a striking degree of expansion and stability – did New Guinea Pidgin undergo the special developments, including relexification from Bismarcks languages, that distinguish Tok Pisin from other daughter dialects of Pacific pidgin. (1988a:3-4)

Tryon (1988a) and Clark (1988) provide further evidence linking the Bislamic languages historically. Clark compares shared lexical items, idiomatic language and semantic innovations in Bislama and Tok Pisin which reflect a common historical development. In his study of Bislama regionalisms, Tryon finds a number of lexical and morphosyntactic features which are not part of standard Bislama, but which are found in Tok Pisin and Pijin:

The fact that a considerable proportion of the evidence is morpho-syntactic and that most of it is attested in the Vanuatu literature of last century suggests that indeed Tok Pisin and Vanuatu Bislama shared a lengthy period of common development and that Tok Pisin separated out only after a considerable degree of stability had been achieved. Indeed, the early literature suggests that the Solomons partook of this common heritage also...(1988b:12)

This supports Keesing's view of a shared period of development for Bislama and Tok Pisin and the existence of a common regional pidgin with minor local dialects. Regional archaisms which may reflect a common history are overlooked by most researchers (and this study is no exception) who opt to use a standardised form as the object of study. Tryon and Keesing are valuable exceptions to this tendency, and my current research into Tok Pisin in West New Britain has produced a few interesting examples of dialect variation from the Tok Pisin norm which resemble Pijin or Bislama, such as the lexical item *pikim* 'dig' – standard Tok Pisin *digim* but Bislama *pikim* or *digim* – and the form *tingse* 'think' instead of *tingting olsem* – Bislama uses *se* as a complementiser (Crowley 1987b; Crowley notes the existence of the archaic form in New Ireland Tok Pisin as well).

### 2.3.3 NEW GUINEA AND THE PERIOD AFTER 1900

As more and more labourers went to various plantations and returned, the pidgin they had learned began to spread in their native islands. The rapid indigenisation of MPE in New Guinea can be attributed to several factors:

- (1) Before large numbers of recruits went to Samoa, there was already a growing number of expatriates in East New Britain, the Duke of York Islands and New Ireland, including traders and Wesleyan Samoan missionaries. Plantations, established in various parts of New Britain and New Ireland in the 1870s and 1880s long before the overseas recruitment had ended, promoted internal labour migration. Furthermore, these New Guinea plantations sometimes recruited labourers who had already worked in Samoa, including some Solomon Islanders. The Germans also hired New Guineans for other types of work: domestic help, carpentry, medical assistance, police work and village administration. Such individuals found MPE useful for communicating not only with the Europeans but also with each other. On the New Ireland and New Britain plantations, for instance, labourers from many linguistic backgrounds needed a lingua franca, as did the police, who seldom worked among their own linguistic groups.
- (2) The usefulness of a lingua franca among speakers of many languages was also enhanced by *Pax Germanica* which broke down the traditional barriers to intergroup communication. At the time of the Germans' arrival, most communities were limited in their range of movement and their intergroup or even intragroup contacts by widespread warfare and hostility. After the Germans had imposed peace, villagers gradually began to widen their communications with their neighbours, as well as to journey to plantations, missions and European settlements, and to interact with other New Guineans in these places.
- (3) The ability to speak the language of the administrators meant access to the material wealth of the Europeans through jobs. As Mühlhäusler points out, 'NGP became a symbol of the new social system and its rapid spread reflected the eagerness of most tribes contacted to participate' (1979:80).

New Guinea's transition into a German protectorate in 1884 had several repercussions on the direction of the development of Tok Pisin. Foremost, English was withdrawn as a model. Thus the continued presence of English in the Solomon Islands and in Vanuatu led to the incorporation of more English lexical items in Pijin and in Bislama than occurred in Tok Pisin. Bislama's development within a French-English condominium meant that French lexical items entered that language, whereas

Tok Pisin borrowed from indigenous languages and to a lesser degree from German. Pidginised German never gained ground because the German colonists did not want New Guineans to speak their language; besides, a stable and rapidly spreading pidgin was already well ensconced. In New Guinea, the German colonists (but not necessarily the administration) found pidginised English perfectly acceptable as a neutral language to use with the New Guineans. On the other hand, because the English-speaking colonists in Vanuatu and the Solomon Islands disliked the form of 'bastardised' English spoken there, Bislama and Pijin were discouraged to a greater degree by the administration. In New Guinea, however, Tok Pisin had several decades to develop prestige without this degradation. In Papua, pidginised Motu was encouraged in order to avoid pidginised English, and the current spread of Tok Pisin there demonstrates the demise of the original bias.

MPE made its debut among the relatively similar languages of East New Britain and New Ireland, the Patpatar-Tolai languages. That these languages influenced the lexical evolution of Tok Pisin, as distinct from Bislama and Pijin, is clear from the number of loan words from these languages in Tok Pisin which are absent in Bislama and Pijin. MPE had already been influenced by other languages and had stabilised in Queensland and Samoa by the time the New Guineans arrived there in any influential number. It can only be suggested that the linguistic contribution of New Guineans to MPE was not so great as to change the basic structure of the language. Thus their major contribution was the changing of MPE into a slightly different form, Tok Pisin; the prestige given to their dialect of Tok Pisin provided the norms for Rural Tok Pisin.

By the time the Australians came to power in Papua New Guinea, Tok Pisin was firmly established and could not be suppressed. The spread of Tok Pisin in New Guinea was rapid as plantations sprouted up all over the country, missionaries extended their spheres of influence, and new job opportunities were created in light industry, shipping, domestic help, mining and administration. By the Second World War, Tok Pisin was known to almost every villager in coastal New Britain, New Ireland and the north-western Papua New Guinea mainland, and was being learned by children along with the vernacular languages.

#### 2.3.4 SUMMARY

In just over 100 years Tok Pisin has evolved from an early pidgin to a stable language spoken by almost a million people, a language used in a variety of contexts and found in a variety of forms. At any point in its career Tok Pisin could have died out or have been replaced by another language, such as German, English or vernacular languages, but instead sociohistorical circumstances promoted its adoption, spread and growth.

What were the ingredients that promoted this language to evolve as it did?

(1) The linguistic diversity of Papua New Guinea discouraged the adoption of a vernacular language as a national lingua franca, since traditional antagonism excluded the possibility of one group's language gaining prestige over another's. Such a situation encouraged the acceptance of a neutral lingua franca such as MPE, and may account in part for the failure of Hiri Motu to gain the widespread popularity that Tok Pisin currently enjoys. In Fiji, however, pidgin English was replaced on the plantations by pidgin Fijian (Siegel 1986, 1987), since:

The Fijians, numerically preponderant, physically intimidating, politically more tightly and hierarchically organized, in their own communities led by elders and warriors, had a dominance that went beyond being on their home turf, in contrast with the young men from scattered islands. (Keesing 1988a:99)

- (2) The development of a Pacific lingua franca and its early use in trade with southern Melanesia, followed closely by the establishment of plantations and labour recruitment allowed for the continuity needed for the early Pacific lingua franca to evolve into a stable pidgin.
- (3) The social distance between Europeans and Melanesians, the numerical preponderance of Melanesians over Europeans at any time, and the withdrawal of English from New Guinea made the target language, English, inaccessible to most New Guineans.
- (4) The interests of the Melanesians in the material wealth available from the Europeans, and the prestige attached to MPE due to its association with access to that wealth, promoted the spread and expansion of the lingua franca. In New Guinea this spread and expansion was encouraged by the imposition of *Pax Germanica* which broke down traditional boundaries among linguistic groups. In later years the development of a feeling of solidarity among Papua New Guineans against foreigners provided Tok Pisin with an emblematic and political role. The spread of Tok Pisin throughout Papua New Guinea can be attributed in part to its political strength: Tok Pisin both unifies the peoples of Papua New Guinea and makes them distinct from non-Papua New Guineans.



## CHAPTER 3

### THE MODEL

#### 3.1 INTRODUCTION

The study of pidginisation and creolisation has attracted a growing number of linguists over the past two decades for the insights these processes provide on a variety of linguistic topics. Of interest to many historical linguists is the source of the modern structures of such languages, in particular the source of those structures in the pidginised language that are not derived from the target language. Several explanations have been proposed to account for such structures, among them: (1) simplification processes, (2) substratum influence, (3) innovation by language learners and (4) universals.

In this study I focus on the role of the substrate Austronesian languages of Melanesia in the creation of MPE and their subsequent influence on the development of this antecedent pidgin into the modern Bislamic languages, particularly Tok Pisin. There is widespread agreement among Tok Pisin researchers about substratum influence in certain aspects of Tok Pisin structure, such as the effect of the phonological systems of MNAN languages on the pronunciation of English lexical items and the normalisation of such pronunciations in the stabilised pidgin. Certain features absent in English but characteristic of MNAN languages, such as the inclusive/exclusive distinction in the first person pronouns, are also acceptable to most linguists as instances of substratum influence, but where other explanations, such as simplification or innovation, may also account for the structures of Tok Pisin, there is a tendency towards treating the role of the substratum as less explanatory, due in part to the widespread belief that substratum theory makes overly strong predictions. Thus Koefoed, in his comparison of the 'baby talk' and relexification theories, states:

An alternative hypothesis would be to state that the native speakers of the model language do not simplify their language and that *all* deviations from the model language that are found in pidgins, must be ascribed to the influence of the underlying languages (substratum influence) [emphasis mine]. (1979:38)

Although this does not reflect Koefoed's position, his statement reflects well the use of 'either/or' models on the part of many linguists.

Certainly substratum theory is not the sole explanation for the structures of the modern languages which derived originally from MPE, nor do the other explanations by themselves constitute a complete model of pidgin genesis and language birth. Tok Pisin came into being as the result of the pidginisation of English over a century ago and a number of influences have affected its development since that time. Although this work focuses on substratum influence, it also seeks to weigh the value of other explanations and to incorporate them into a single holistic model, attempting to ascertain at

what point on the developmental continuum a particular explanation has the greatest explanatory force or whether, indeed, two or more explanations act as complementary forces.

The model adopted here explains the genesis and development of Tok Pisin in three parts: (1) partial learning, (2) calquing from the substrate and (3) internally-generated innovation arising from the evolution of productivity. These are elucidated below, followed by a discussion of the role of universals.

### 3.2 PARTIAL LEARNING

Much has been written on Tok Pisin as a pidginised form of English, that is, as resulting from the simplification of English morphology and syntax and from the reduction of the English lexicon. The notion of simplification, however, is problematic for various reasons. Studies of simplification tend to compare the end result of the process, a pidgin, with the target language, English, showing that the pidginised form is 'simpler' than the target language from which it is derived. The problem is not the validity of such statements, but resides both in the concept of 'simplicity' and in the comparative approach.

It is widely believed that gradual language change over time also involves simplification, but that this kind of change is not as rapid and drastic as is the case with pidginisation. Hence the concept of simplicity is not absolute but a question of degree. While some linguists place language change and pidginisation on a single scale, others prefer to treat pidginisation as a distinctly different and rare process, not infrequently arising from the assumption that pidginisation is a recent phenomenon resulting from European expansionism. Even within the realm of pidginisation, the problem of quantitative measures rears its head:

Since pidginization is a process more general than crystallization of pidgins, and since pidgins, once formed, may be elaborated in content and use, while remaining pidgins, the characteristics found in development to, and of, a pidgin admit of degrees...To analyze them, and to place them among other types of language and language use, quantitative measures are essential. (Hymes 1971:69)

As Mühlhäusler points out, pidgins vary in their degree of simplification, since simplification is a dynamic process (1974:68). Hymes notes further that different types of simplification occur in language, (e.g. baby talk, foreigner talk, language loss), and that it is debatable as to whether such entities are examples of pidginisation. He suggests that simplification be used to refer to 'change in complexity of outer form', and that it is not the sole diagnostic tool for recognising instances of pidginisation, but acts in conjunction with reduction of inner form and restriction of use (1971:70). Once agreement is gained on the definition of simplification and a 'simplicity meter' is worked out to everyone's satisfaction, then the terms may be used profitably. As it stands, simplicity ultimately is definable only in terms of the objects of study.

The approach to simplification involving a comparison of Tok Pisin with English presents other problems. Discussions of simplification and reduction tend to emphasise the end product of these processes relative to English but not to Melanesian languages. They fail, for instance, to show the degree to which English morphology and syntax are alien to speakers of Melanesian languages,

whereas the differences in the linguistic structure of these languages may equally well explain the absence of English morphology in MPE. Thus the absence of tense suffixes in Tok Pisin is attributed to simplification of English while ignoring the fact that tense in MNAN languages, if marked, is not indicated by suffixes. Although the result is a form of English that is simpler than a native speaker's version, the speakers of MNAN languages did not consciously simplify the structure of the target language, but merely failed to learn its syntactic complexities, especially where these were quite unlike the morphological and syntactic structures of their native languages. It can be hypothesised, in fact, that both simplification and substratum influence are possible explanations: if originally the English speakers consciously simplified their language and dropped inflectional affixes such as the tense morphemes, then Standard English could not be learned by the Melanesians. On the other hand, if the English speakers did in fact use these affixes in their speech to Melanesians, the Melanesians may not have learned them for several reasons: (1) the result of phonological interference reduced final consonant clusters such that a form like *talked*, with a final [kt] cluster, was pronounced [tok] (see section 4.1.5); (2) lack of familiarity with the target language prevented parsing affixes from roots (see section 5.2.2 on fossilised plurals); and (3) the function of the affixes, even if successfully parsed, was not understood due to their un-Melanesian nature. Lack of empirical data on the speech of the English in their initial contacts with Melanesians prevents a conclusive either/or decision, and so both explanations are possible and valid.

It can also be shown that certain Tok Pisin structures are simpler than comparable MNAN structures, since Tok Pisin has less morphophonemic variation and a smaller inventory of morphemes than do MNAN languages. For instance, the possessive construction in Tok Pisin involves the use of a single case marker, *bilong*, whereas in many MNAN languages there are three or more distinct possessive constructions and possessive markers. Nonetheless, the use of the possessive construction in Tok Pisin resembles the use of similar constructions in MNAN languages more than the use of *of* in English and certainly more than it does the use of the possessive inflection /s/ in English (see section 5.3.2).

While native speakers may simplify their own language by using registers like 'foreigner talk' or 'baby talk', simplification of the target language on the part of the learners must be qualitatively different, because the native speakers recognise the changes whereas the learners may not. It is important to remember that, while the native speakers may simplify consciously or unconsciously, it is impossible for learners to simplify consciously if they are ignorant of the more complex form to begin with. On the other hand, learners may recognise and comprehend certain target language forms or structures at certain stages, but avoid producing them in their speech:

...the assumed strategy of the learner to use less complex solutions even in cases where the more complex ones lie within the range of possibilities of the internalized grammatical system. (Meisel 1983:146)

In this case, only continued exposure to and learning of the target language will place learners in a position where they are ready to produce the form. This continued exposure and learning process (based on numerous social, affective, linguistic and other factors) is a key difference between pidginisation (leading to a pidgin) and second language acquisition (cf. Andersen 1983:10ff); under the social and linguistic conditions that lead to pidgins, inadequate input may play an important role in

maintaining simplicity, as learners never reach the stage where they can leap from comprehension to production.

The point is that, although comparing Tok Pisin to English shows that Tok Pisin lacks certain morphological and syntactic features of English, it is simpler, relative not merely to English but also to MNAN languages. Furthermore, Tok Pisin represents more than simplified English; it also represents how Melanesians, faced with English lexical items, interpret and use them.

English provided the bulk of the lexicon of Tok Pisin, but its contribution to semantics and syntax is usually limited to cases of semantic overlap or, in Haugen's terminology (1972:70), 'analogues' between MNAN languages and English, as in the case of *bilong* and English 'belong'. Although the bulk of the syntactic morphemes of Tok Pisin derive their lexical shape from English, their function is non-English in spite of any semantic overlap. That is, the use of a lexical item in Tok Pisin is frequently foreign to its use in English. To return to the above example, *bilong* has a number of semantic functions as a preposition or conjunction in Tok Pisin, whereas *belong* is a verb in English with a fairly restricted meaning. Nonetheless, there had to be some semantic connection originally for English 'belong' to have been adopted into MPE: both *belong* and *bilong* share a notion of ownership.

The approach taken here is to view the initial contact situations which gave rise to pidgin English as involving 'partial learning'. This term subsumes the notions of simplification and reduction, but de-emphasises the English-biased comparative approach while avoiding the definitional problems of the term 'simplification'. Partial learning is a more general term describing the situation in which:

...the model language was presented in a simplified form (model simplification) or...the model was imperfectly learned, or...a combination of these: imperfect learning of a simplified model. (Koefoed 1979:42)

The first stage in the creation of jargon English in the Pacific was the learning of individual English lexical items appropriate to the context in which the lingua franca was used, namely in communication with Europeans or fellow Pacific islanders, at first in trade on the islands or on ships, then on plantations in Queensland, New Caledonia and Samoa. Some islanders learned more English syntax and lexicon than others (cf. Keesing 1988a:41), but given the limited nature of early contacts and the social distance between Europeans and islanders, it is unlikely that much morphology or syntax was available to the majority of islanders, especially Melanesians, as models to be learned. Even the lexical items that were learned were only *partly* learned; that is, the pronunciation of these words was subject to interference from native languages, and the semantic content was more Melanesian than English:

Lexical information is acquired by native speakers of a language over a long period of time and this process cannot be repeated under the adverse learning conditions characterising the development of jargons. Thus, whilst some of the lexical information is restructured to suit the phonetic and semantic habits of the learner, most of it is lost, only that needed to achieve the minimal aim of having at one's disposal a few names for objects and actions remaining. This constitutes a small and sometimes distorted subset of

the lexical information contained in the lexical items of the lexifier language.  
(Mühlhäusler 1979:187)

It is likely that content words, especially nouns, adjectives and verbs in isolation, constituted the bulk of the first English available for learning. As contact continued and increased, it became necessary to string these single contentives into larger units, and at this point devices were needed to mark the relations of the content words to each other in phrases and then in sentences. What was available for this purpose? The choice was either to begin to adopt English functors, including both function words and inflections, or to make use of the content words available. The fact that *bilong* and *ol* (from the English content words *belong* and *all*) were ultimately adopted, instead of the inflectional suffixes that mark possession and plurality respectively, suggests a pragmatic approach to communication. Obviously, classrooms teaching prescriptive English linguistics were not set up, but use was made of the materials at hand. In other words, content words were adapted to act as functors. The process of adaption began early in the jargon stage and, as the jargon developed into a stable pidgin and then into an expanded pidgin, more content words were adopted and then adapted. This adaptation involved an extension of the semantic field contained in the original content word, often along lines which brought it closer to the semantic field contained in MNAN (or, following Keesing 1988a, Eastern Oceanic) morphemes used for the same function.

### 3.3 SUBSTRATUM INFLUENCE

Most historical analyses of Tok Pisin or related languages focus on the simplification of English or on independent development to account for their structure. Substratum influence, however, has received less attention, with the notable exceptions of Walsh (1978), Camden (1979), Mosel (1980), Simons (1985), Charpentier (1979b), Keesing (1988a) and Crowley (1987b, 1988). One reason for this lack of attention is that linguists are chary of substratum theories. Substratum studies are often perceived as derived from 'uncontrolled hypotheses, alias guesses, and the mysticism of so many substratum theories' (Emeneau 1980:61). This stigma has its origins in the works of historical linguists who proposed substratum theories to explain language change for European languages, especially the Romance languages, when the possible substrate languages were unknown. Because 'substratum has been alluded to with little investigation of the structures in contact, or has been applied in an *ad hoc* fashion' (Anderson 1973:88), the theory has gained the reputation of being unscientific and extremely speculative, and linguists still avoid the topic lest they be labelled 'substratomaniaacs' (see, for example, Bickerton 1981). Hall warns:

It is in general wise to be cautious in assuming the effect of a substratum on the history of a language, unless we have specific and detailed evidence to render such an assumption likely. (1966:113)

Hall, in a lecture given at McMaster University in 1985, suggests that three conditions must be satisfied for substratum theories to be worthy of attention: (1) evidence that the structures in question were indeed present in the substratum; (2) evidence for a period of bilingualism; and (3) evidence of prolonged contact. In the case of Tok Pisin, these conditions can be met: the substrate languages

continue to be spoken throughout Melanesia today, and have existed in a bilingual situation with Tok Pisin for several generations.

There are, furthermore, two assumptions that have discouraged investigation of substratum influence in Tok Pisin and its congeners: (1) substratum influence was hampered by the structural diversity of the MNAN languages involved in the creation of MPE; and (2) substratum influence involves virtual morpheme-by-morpheme identity, that is, literal translation from any given substrate language into Tok Pisin.

Although it appears impossible to reconcile the diversity of the MNAN languages with the possibility of their acting in tandem as a substratum in the development of MPE, upon closer inspection one realises this apparent diversity is misleading. It is often the case that the languages within a particular geographic region belong to a *Sprachbund*, or language area. Grace, in a discussion of New Caledonian languages which could equally apply to other parts of Melanesia, suggests a comparative perspective in which:

the languages of a larger area are seen as constituting a single whole rather than as so many separate entities. The impression which I get when I consider a larger area...is one of striking uniformity in some respects and diversity in others. One is tempted to suggest that the languages of the area as a whole might be made the object of a single linguistic description – that those languages have a single grammatical system...a single phonological system (with each language operating with a selection from the phoneme inventory of the system as a whole), and a single vocabulary except for a proliferation of synonyms (with each language, again, operating with a selection from the inventory of synonymous forms). (1981b:260)

Lynch says of North Tanna, Lenakel and Whitesands, 'the grammars of all three "languages" are virtually identical, with the same morphemes being used in the same way in each' (1978:1). Walsh uses Raga in his comparison of Tok Pisin with the Eastern Austronesian languages (those spoken in Vanuatu, the Solomon Islands and the Bismarck Archipelago) because he regards Raga as 'typical of the relevant subset of EAN [Eastern Austronesian] languages' (1978:187). For similar reasons Camden chose Tangoan in his comparison of Bislama with Vanuatu languages:

The use of Tangoan for this comparison is not intended to imply that it has any special relationship with Bislama not shared by other New Hebridean languages, or at least by other Oceanic type languages...Rather, Tangoan is regarded as broadly representative of this substantial group of Oceanic type languages, with the implication that a comparison between Bislama and any other such language, while almost certainly differing in detail, would probably show roughly comparable results. (1979:53)

Simons uses To'abaita in her comparison with Pijin for virtually identical reasons:

I do not mean to imply that To'abaita is any more closely related to SIP [Solomon Islands Pijin] than any other of the Malaitan dialects...But I do assume that To'abaita is representative of all the Malaitan languages and therefore it is appropriate to use it specifically in making a comparison to SIP. (1985:54)

In West New Britain, a single grammar would suffice to describe the Siasi languages (Lusi, Kabana, Kilenge), the Bibling languages (Mouk, Aria, Lamogai), the Whiteman language, Amara, and the NAN language, Anêm, with only minor additions of morphological detail for each language (see Thurston 1987).

Austronesian languages across Melanesia also have much in common, and Keesing points out that the comparison can be extended beyond Melanesia:

For our purposes, what matters is that there is a vast zone – extending from the central and eastern Carolines all the way across Polynesia to Easter Island and Hawaii, and down the central Pacific through Fiji into all or most of the New Hebrides, through the Banks and Torres Islands and through the southeastern Solomons – within which relatively closely related Oceanic Austronesian languages are spoken. In most of this zone, the languages are strikingly similar in a number of grammatical, lexical, and phonological respects. (1988a:69)

Although this study focuses on Melanesian Austronesian languages, Keesing's work shows that many of the features to be discussed here can also be attributed to Oceanic Austronesian languages outside of Melanesia.

In MNAN languages, there is considerable identity in the semantic realms of individual morphemes, be they inflectional, derivational or root morphemes. There is also widespread syntactic expression of certain semantic categories, such as the kinds of modality distinctions that are marked, the distinction between transitive and intransitive verbs, and the expression of case relationships. How these are expressed, that is, put into sequences of morphemes, is the source of apparent diversity, inasmuch as each language has a particular morpheme inventory that differs in size and is subject to language-specific morphophonemic rules.

In the comparison of a sample of MNAN languages with Tok Pisin that follows (Chapters 4, 5, 6 and 7), it is shown that the MNAN languages share a number of such syntactic and semantic features both among themselves and with Tok Pisin and its congeners. It is proposed here that the substratum influence on Tok Pisin's ancestor, MPE, was an areal phenomenon. It involved a number of different languages which seem quite diverse in structure and in lexicon, but which nonetheless can be shown to have more in common than meets the eye (see also Gilman 1986 regarding African areal characteristics in Afro-European pidgins and creoles).

Most substratum studies are more concerned with the way these syntactic categories and semantic features are expressed as sequences of morphemes than with their widespread distribution. Thus, for instance, in a comparison of the processes which differentiate transitive and intransitive verbs in Tolai with similar processes in Tok Pisin, certain verbs in one language use one process, whereas the same verbs in the other language use a different process, leading to the conclusion that substratum theory is wanting as an explanation for the source of Tok Pisin structure. A similar comparison between two MNAN languages, however, will show the same minor discrepancies between the expression of transitivity and intransitivity. The point is that all these languages share the syntactic category of transitivity and express it in similar ways (suffixes), even though the choice and range of verbs which take the suffix do not provide a one-to-one match.

Grace distinguishes between the content form and the lexification of a language, the former being 'everything concerned in the conceptualisation of the message' and the latter being 'the forms of the actual words' (1981a:24). He goes on:

The phenomenon of pidginization is another which I believe is elucidated by the concepts content form and lexification. Pidgins are often described as having two sources, and the nature of the contribution made by the two sources is seen as different...In my terms, [the superstrate language] would be said to have provided the bulk of the lexification while the content form derives in significant measure from [the substrate languages]. (1981a:27-28)

The MNAN substratum in MPE involves the content form, whereas the lexification of the content is primarily derived from English. Both have been subject to various influences during the initial pidginisation of English and the later development of MPE through internal resources. Grace suggests further:

...it is not uncommon to see the lexification/content-form dichotomy referred to as a distinction between lexicon and grammar...I was long puzzled over statements that Melanesian Pidgin English (*Tok Pisin*) had English vocabulary but Melanesian grammar. It is true that the lexification is predominantly English, but there seemed little basis on careful examination to say that the grammar was Melanesian. I believe such statements are based on the easy translatability that is found between Pidgin and various Melanesian languages, and ultimately on the fact that the meanings of Pidgin morphemes seem frequently to be based on Melanesian models. (1981a:28)

Since the usual approach to comparative studies of 'grammar' is to contrast the lexification of languages such as Tok Pisin and Tolai, they fail to reveal the similarities in the content forms of the two languages which account for the 'easy translatability' mentioned above by Grace. Such a focus on lexification is possible in cases of near or total convergence, such as the linguistic situation in India as described by Emeneau (1980) and Gumperz and Wilson (1971), where languages of different families have come to show morpheme-by-morpheme identity over a long period of contact, that is, where the content form and the lexification of this content form have become virtually identical over time. Complete convergence of the lexification of MPE with that of the MNAN languages, however, was impossible given the differences of lexification among the MNAN languages and given the limited resources for such a convergence due to incomplete learning of the English lexicon. Nonetheless, similarity of content form among the substrate languages is reflected in the content form of the modern descendants of MPE.

The final problem in substratum theories is defining the mechanism whereby substratum influence is transmitted. It is commonly conceded that phonological interference and borrowing lexical items from the substrate languages are acceptable, but the possibility of borrowing syntactic structure is frequently denied. It is proposed here that calquing is the primary means whereby the content form of substrate languages is transmitted to the emergent pidgin (see also Keesing 1987, 1988a, 1988b). Calquing involves expressing something in one language as it is done in another, that is, wording an idea in a similar way (Grace 1981a:28). Calquing may involve morpheme-by-morpheme translation



or it may simply involve approximating a native structure with the means available, that is, modelling a structure on substrate structures.

The pidgin carried from the islands of Melanesia to the plantations of Queensland, Samoa and New Caledonia served as the basis of a lingua franca not only between Melanesians and Europeans but, more importantly, among Melanesian labourers as well. Labourers familiar with various dialects of Pacific pidgin English brought with them a variety of lexical repertoires and means of expression using these lexical items. These forms of partly-learned English were continually augmented and the variation was levelled as their communicative function as a single lingua franca increased. On the plantations, where the workers constantly interacted with other Melanesians, increasingly complicated messages required the development of an increasingly complicated lingua franca. Even if more formal means for learning English had been available, progress in this new and very foreign language could not have kept pace with the growth of the need for communication. The Melanesians, however, already had a lingua franca at hand from which to work. It is likely that they used English-derived lexical items in calquing native language structures, since not enough English syntax had been learned with which to mark increasingly complex semantic relations among words and phrases. The lexical repertoire was not large enough to express the growing need for semantic distinctions, and while new lexical items entered the lingua franca from English, calquing also provided a means of producing circumlocutions which were replaced at a later stage both by introduced lexical items and by productive structures (cf. Mühlhäusler 1979:228ff).

Inasmuch as the lexical material available for calquing was limited at the outset, it is likely that calquing involved making use of the lexical material at hand for new constructions and concepts, and so some calques used English-derived material that came closest to comparable MNAN structures without matching them identically. For example, *pinis* is used as a completive aspect marker where MNAN languages have specific completive morphemes which do not necessarily translate as 'finished' (see section 6.3.2). Thus the partially learned semantic content of English *finish* was extended to a semantic field incorporating a MNAN aspect marker.

The success of individual attempts at calquing related to the hearers' ability to decode the message. Thus, if the hearers themselves would have calqued in a similar manner according to their own native languages and the lexical material available, then the calque would be successful, as the hearers would understand the new calque and perhaps begin to use it. Andersen has a similar description of such participant interaction:

If a given individual creates a unique form-meaning relationship (one inferred from, but not explicitly present in, the input) to express a meaning that his conversational partner has no linguistic means to express and he succeeds in communicating with this innovated form, this innovated form-meaning relationship becomes potential intake for his conversational partner. If, in addition, the partner is himself close to innovating a similar form for this meaning, it is more likely that he will accept this form and the meaning it conveys and assimilate it into his interlanguage. (1983:15)

Although Andersen's scenario is based on the function of cognitive and linguistic universals in determining the direction that innovation may take, it can equally be applied to calquing in the same

situation. In fact, it is likely that calquing is the first step in such a problem-solving space, and it is when calquing fails that other means may come into action.

Successful calques would spread if they approximated the structures in many if not most of the native languages of the group, while unrecognisable calques would be replaced by more recognisable ones. Eventually, stabilisation of the pidgin was achieved when a number of successful calques spread and became norms.

For no single individual would the entire inventory of calques have matched the native language identically, that is, morpheme-by-morpheme. Similarly, for most individuals there would be calques that bore little relationship to structures in their own native languages and had to be learned (since everyone else was satisfied with such calques).

Another factor in the success of calques was their ability to be easily interpreted due to their semantic transparency. Paraphrasing Comrie (1981:25), if the structure of a particular calque 'facilitates recovery of the semantic content' then the calques (or other innovative constructions) will be successful. Although Comrie is addressing the functional explanations of universals, his analysis applies equally well to calques. To return to the example of *pinis*, this lexical item is quite easily interpreted as a completive aspect marker even for those who mark this aspect in ways other than a sentence-final lexical item. In English, there are numerous means of marking completed action, including the perfect tense as in 'he has eaten'. This bears little structural relationship to 'he eat finish', but the meaning is clear and the completed nature of the action much more salient than in the English perfective construction. Given knowledge of the meaning of *pinis* from utterances where it means 'finish', (e.g. *wok i pinis, yu go bek nau* 'work is finished, you go back now'), a Melanesian whose own language marks completive aspect would consider this lexical item a prime candidate for the same function in MPE.

The learnability of unfamiliar calque structures was enhanced by several factors:

(1) It is my impression from the literature and from my own experience in West New Britain that many Melanesians are at least bilingual in their own vernacular and a neighbouring one and were likely to have been so in the nineteenth century. If this is the case, they had two or more sets of linguistic structures from which to produce or interpret calques. Almost all Melanesians thus already had a linguistic repertoire of two or more Melanesian languages to draw on, making the task of learning constructions different from their first languages less onerous. Access to more than one linguistic code is often overlooked in substratum studies (and criticisms of such studies) but must play an important role in determining which calques are accepted and which are rejected (part of the evidence in determining why some substrate structures are not encoded in a pidgin). Such bi- or multilingual people probably approached the language-learning task expecting a certain amount of similarity, based on experience with neighbouring languages belonging to the same *Sprachbund* as the learners' first languages, as well as a certain number of differences, as found even in *Sprachbund* settings. Research on the relationship between bilingualism and third language learning would add much to our understanding of such language contact situations.

(2) Because a major part of the corpus of calques was similar in content form to forms in native languages, the familiarity greatly reduced the difficulty of learning new calques. Similarly, since

many MNAN languages have two or more possible structures denoting the same or similar semantic content, the range of acceptable calques is increased. Variability within one's first (or second) language is an important factor in the accessibility and acceptance of new language structures (cf. Silverstein 1972:603). A combination of these factors and bilingualism produces a linguistically-flexible population.

(3) Slight differences in word order and morphology are less difficult to produce and interpret than major differences in the conceptualisation of the message. This is one factor explaining the rapid spread of MPE among Melanesians, as well as the failure of European languages (English, German and French) to become widespread and conversely, the inability of a number of European residents in Papua New Guinea to learn Tok Pisin fluently. Certainly this was an important factor for me when I was learning Lusi, an Austronesian language; once I'd learned Tok Pisin, I found that calquing Tok Pisin structures into Lusi (with the requisite morphosyntactic complications) often generated correct or near-correct utterances, where calquing from English was near impossible. Keesing reports the converse: 'I had earlier been struck, when I had learned Solomons Pidgin through the medium of Kwaio, an indigenous language I already spoke fluently, that this learning task mainly required learning Pidgin equivalents of Kwaio morphemes' (1988a:1).

(4) The process was not an overnight development but the result of trial and error, thus providing time to absorb new calques as they spread.

As the labourers developed the lingua franca into an effective communication system, the Europeans in charge were faced with a dilemma: either they learned the emergent language or they taught their workers English. Obviously the choice was clear: it was more expedient for the Europeans to learn from the Melanesians. First, the social distance and numerical proportions of Europeans to Melanesians prevented Melanesians from gaining access to English. Second, the language-learning task for the Europeans was diminished by their familiarity with the English lexical items in the lingua franca (although false cognates continue to plague the unwary learner). In other words, they had to learn the emergent syntax, but they already controlled the bulk of the vocabulary.

A few Melanesians had access to the target language while working as servants, *bosboi* (native overseers) etc., and developed a greater knowledge of English. They acted as disseminators of new lexical items, but nonetheless would have to keep up with the linguistic developments of their fellow Melanesians if they wished to continue to communicate with them. Similarly the degree of linguistic competence of the Europeans varied depending on the amount and duration of contact with the workers, some speaking the emergent MPE well, others poorly.

### 3.4 INTERNALLY GENERATED INNOVATION

After a pidgin stabilises in the manner described above, it possesses internal resources for independent development, that is, it can begin to produce structures unique to the pidgin. The stabilisation of the language permits certain structures to become productive and, in this way, the language develops and expands further. A certain amount of innovation is present in the pre-stabilisation period, but after calquing has provided the language with structural models, innovation takes over, using these models to allow further expansion. Once a stable lingua franca is produced,

attempts at calquing are less acceptable and the substratum is less influential, as innovations consistent with the new structure can be internally generated, whereas substratum may intrude upon this structure. At this point, the workers are fluent in the pidgin, but their native languages continue to have a relatively minor influence, affecting the phonology and minor points of semantics and syntax. When the pidgin is brought home to the islands and is used within a single cultural milieu, the native languages promote the development of discourse structure and other styles, resulting in regional and sociocultural variation.

When prestige becomes associated with certain regional forms due to various social factors, then the influence of the substratum in that region may be spread to other regions. For instance, prestige associated with the Rabaul dialect of Tok Pisin allowed the spread of prenasalised voiced stops into areas where prenasalisation was uncommon.

Once the language begins to develop on its own and has created unique structures and rules, the substratum influence of the earlier stage may become more difficult to recover, especially where diachronic data are not available. Synchronic comparisons of Tok Pisin with MNAN languages can demonstrate that certain structures seem to have no counterparts in either MNAN or English. This is because internally-generated innovations have produced unique structures or even replaced earlier substrate-based structures. As Samarin warns, analyses must account for 'the much-overlooked innovative powers of a pidgin' (1971:125). Nonetheless, certain innovations in MPE can be shown to have their origin in earlier calques.

Tok Pisin, Bislama and Pijin evolved individually once MPE was removed from the plantation setting to the home islands, being subject to different social circumstances in each territory and thus to different degrees of substrate (and superstrate) influence. Nonetheless, the MNAN content remains at a more fundamental level. As Hall says:

...the resultant pidgin may become creolized [or expanded], thus transmitting features of the substratum language to later generations and transmuting them into permanent characteristics of the creole [or expanded pidgin]. (1966:111)

The influence of Tolai on Tok Pisin is not as strong as commonly assumed, since MPE had already stabilised and was internally resourceful by the time it came to New Britain. Tolai acted as an adstratum language and hence did not restructure MPE to any great degree, although the Patpatar-Tolai languages contributed, as adstratum, a number of lexical items and perhaps some minor syntactic structures (such as the use of Tolai *laka* as a tag question marker) which were central in the development of MPE into a unique language, Tok Pisin. For the reasons listed above, the Tolai learned MPE quite easily as a language in its own right when it arrived in New Britain, and New Guineans who worked on the Samoan plantations prior to that undoubtedly responded to MPE in the same way. Although Mühlhäusler (1979, 1980a, 1985a, 1986) has documented the development of Tok Pisin from the language-internal perspective, the MNAN source of the material from which much of this development took place remains to be clarified.

### 3.5 UNIVERSALS

A number of linguists have called upon universals as another explanation for the structures that arise during the processes of pidginisation and creolisation, and some space is devoted to the topic here because 'it provides a serious alternative to the transmission theories' (Alleyne 1980:131). The fact that the term universals is used for a variety of phenomena in linguistics has led Alleyne to state that 'there are still as many versions as there are adherents' (1980:131). Comrie (1981) distinguishes between two major approaches to the topic of universals; the first involves 'absolute universals' and 'tendencies' and is best exemplified by Greenberg's work (e.g. 1966, 1974); the second, 'formal' and 'substantive' universals, reflect the transformational-generative approach to language.

Briefly stated, the first approach involves comparisons of a wide variety of languages in the hope of discovering what is common to all or most languages. A linguistic phenomenon common to all languages, such as 'all languages have oral vowels', is an absolute universal. Universal tendencies, an unfortunate oxymoron, refers to those widespread linguistic features which would be absolute universals but for the presence of a few exceptions among the world's languages. Such tendencies are more frequently found than absolute universals (which make very general statements) and hence they are statistically important. Among such universals and tendencies may be found 'implicational hierarchies' which make statements predicting the presence or absence of certain linguistic features based on the presence or absence of other linguistic features. Implicational hierarchies refer to the interaction of linguistic properties, such as 'if a language has a feature *x*, this implies the presence of a feature *y*'.

The second approach follows the theoretical tenets of transformational-generative language description, involving a relatively concrete level of syntactic representation (surface structure) and varying degrees of abstraction from this surface structure (deep structure). According to this approach, children acquiring a first language cannot possibly deduce the abstract underlying principles and the rules required to derive surface structure from deep structure in the raw, random data presented to them by adults:

This learnability problem evaporates if one makes the crucial assumption underlying orthodox transformational work on language universals. The reason why the child acquires his first language so effortlessly is that the crucial abstract principles of transformational-generative grammar are innate: they are available to the child from birth (or, perhaps, are available from a certain period soon after birth as part of the maturational process, but at any rate are preprogrammed at birth), so that the child does not have to learn them, but can use them in figuring out which particular language, of those permitted by the general theory of transformational-generative grammar, is being spoken in his speech community... (Comrie 1981:3)

Language as a whole cannot be innate, as this would suggest that the language of the parents is genetically inherited by the child, and it is well known that children can learn any language spoken around them even if it is not that of their genetic parents. Consequently, only certain principles are innate, and these principles must be the same for all children, irrespective of their ethnicity; that is, these innate principles must be universal. The degree to which the innate nature of language defines linguistic structure is subject to considerable debate, from the weaker statements suggesting that

humans are genetically endowed only with the ability to learn language, to the stronger statements which hypothesise that certain linguistic structures, discoverable through the study of universals, are themselves somehow genetically encoded. Such universals fall into two classes: (1) substantive universals 'delimit the class of possible human languages relative to the class of logically possible languages' (Comrie 1981:15) and (2) formal universals are, in particular, the constraints that delimit the class of possible rules used in syntax.

The literature on pidginisation and creolisation shows both the Greenbergian and the transformational-generative approaches to universals. Relating to the first approach, earlier studies often compare a number of pidgins or creoles in order to isolate the characteristics that are universal among such languages as a special linguistic class. Such comparisons are usually preliminary to studies which compare these widespread pidgin features with those of the source languages from which the pidgins are derived. This latter comparison reveals universal processes of simplification or universals of second language learning, such as the loss of morphophonemic variation and the replacement of inflectional and derivational affixes with free forms.

As examples of the second approach, Silverstein (1972) and Kay and Sankoff (1974) hypothesise that the surface structures of pidgins are close to deep structure, which itself reflects the universal properties of language. Pidginisation results in the selective adoption of those structures which are shared by the languages in contact, and such shared structures are most likely to be those which reflect universals. The structure of pidgins, therefore, is thought to reveal the universal properties of language more succinctly than is possible with non-pidgin languages. Similarly, simplification processes result in the loss of the language-specific transformational-generative rules which differentiate between universal deep structure and language-specific surface structures. Hence pidgins, being derivationally shallow, reflect universal deep structure and are worthy of study because they can help linguists establish the nature of universal grammar.

The relationship between the process of pidginisation or creolisation and the process of first language acquisition has also been explored in order to ascertain the universal properties of language. Traugott (1973) argues that both processes reflect simplification of language and both processes result in unique structures: in pidgins (see also Givón 1979), those structures which cannot be attributed to either the native languages of the learners or to the target language; and in first language acquisition, those structures which cannot be attributed to the adult model. The presence of such unique structures is assumed to be the result of recourse on the part of adult and child language learners to 'natural syntactic processes'. Bickerton (1977, 1981, 1984) compares first language acquisition with creolisation. He argues that pidginisation involves relexification (calquing) of the native language, whereas in creolisation children learning an inadequate pidgin fall back on universal grammar to repair linguistic gaps as shown in the resultant creole<sup>3</sup>, which possesses linguistic structures found neither in the pidgin nor in the parental languages. His position, that children create creoles from universal grammar, is diametrically opposed to the positions of Kay and Sankoff (1974) and of Traugott (1973), that adults manipulate universal grammar to create pidgins. On the other hand, where Silverstein (1972) sees *similarities* between contact languages resulting in the manifestation of universal grammar in the pidgin, Givón (1979) sees *differences* among the adult languages leading to the manifestation of universal grammar in the pidgin.

There are other problems with universals besides the differences of opinion among linguists as to how and where universals play a role in pidginisation and creolisation. The major difficulty is the use of universals as an explanation for the source of pidgin and/or creole structures. Relating to the first approach, the fact that some pidgins are typologically similar or that they derive from a target language in similar ways is not an explanation for the source of such features. Comparisons of pidgins simply establish tautological parameters whereby pidgins may be defined, and comparisons of pidgins (as an *a priori* class) with their source languages 'are really dealing with ways in which a structural typological relationship between pidgins and European languages may be stated' (Alleyne 1980:134).

Regarding the second approach, Naro points out that there are counter-examples to the hypothesis that pidgins reflect universal grammar, 'i.e. cases in which selective adoption of structures has led to an over-all structure that defies known universals' (1978:340). According to Alleyne, such universals are 'more a descriptive statement based on the observation that all pidgins bear a certain relationship to so-called "natural language" in terms of "shallowness" of phonology and "shallowness" of syntactic structures' than an explanation for the structure of pidgins 'except insofar as there is an implied "simplification" of European language along universal lines' (1980:134).

The problem remains, therefore, as to the ability of universals to explain (and not simply describe) phenomena such as first language acquisition, second language learning and language change. Various linguists have taken the approach that universals are the result of the cognitive capacities of *Homo sapiens sapiens*. Naro (1978) and Meisel (1983), for instance, have turned to psycholinguistic explanations to account for the statistically relevant features of pidgins, the former interested in how the native speaker simplifies his own speech, the latter in how and why the learner simplifies the input. According to this approach, cognitive constraints on language learning and processing result in imperfect learning. These cognitive constraints are universal in that, in the right social and psychological circumstances, all language learners are subject to the same constraints, thus 'the formal characteristics of the outcome of pidginisation are explainable in terms of cognitive constraints on processing of linguistic input and production of comprehensible speech output' (Andersen 1983:28). Naro (1978), following Ferguson and DeBose (1977), examines the strategies used by native speakers to simplify their speech when addressing language learners, suggesting that the resultant simplified forms act as input to the language learner and restrict complete learning. Inasmuch as such strategies are universal, various pidgins that arise from such simplified output will be similar. His first principle, 'express each invariant, separately intuited element of meaning by at least one phonologically separate, invariant stress-bearing form' (1978:340), accounts for the absence in pidgins of affixation and of paradigmatic variation such as case marking in the pronouns. His second principle, 'avoid excessive accumulation of separately intuited elements of meaning in single surface units' (1978:341), explains the absence of coordination and subordination etc., resulting in the typical short sentences of pidgins. Meisel (1983) takes the view that the learner may consciously choose cognitively less complex structures in order to avoid an accumulation of complexities that would hinder the learning process.

Other linguists (e.g. Bickerton 1984) have focused on the belief found in the transformational-generative approach that universals reflect innate language structures and suggest that pidginisation and/or creolisation, as well as first language acquisition, can provide the clues to such biologically-

determined universals. Whether in the acquisition of a vernacular language or of a pidgin as first language, the models that children create from the heterogeneous input of adults (which often bear little resemblance to adult speech) are seen to be direct manifestations of genetically endowed linguistic structures – ontogeny recapitulates phylogeny. Similarly, the supposition that pidginisation results in the stripping down of target languages to the bare bones of language structure also leads to hypotheses that pidgins reveal genetically inherited language characteristics – pidginisation as archaeology. There is a danger, however, in equating biological determinism with linguistic universals, as one must draw the line between the point at which genetic predisposition leads to linguistic structures and the one at which cultural input and cognitive development lead to linguistic structures or alter the innate features. Bates, criticising Bickerton's (1984) language bioprogramme hypothesis, argues:

many universal or at least high-probability outcomes are so inevitable given a certain 'problem space' that extensive genetic underwriting is unnecessary. To be sure, some kind of genetic determinism is necessary to place the organism in the right ballpark for the problem to be encountered and solved. But the genetic contribution often proves to be far smaller and far less direct than one might expect given the reliability of the phenomenon in a given species. (1984:188)

She suggests that: 'universal or high-probability structures shared by creoles need not necessarily reflect innate tendencies of any direct sort. They may be the consistent rediscovery of a set of logically possible solutions to a problem space whose structure is still not well understood' (1984:189).

The idea that pidginisation involves a return to the innate universal deep structure readily accessible to children suggests that adults can somehow 'reach down' into their genetic linguistic repertoire in spite of years of specific language use which has obscured it. If socially- and linguistically-deprived children are incapable of dipping into the 'language bioprogramme' and thus acquiring language on their own, it is unlikely that an adult, who has internalised vast amounts of cultural information (including a specific language) will be able to discard accumulations of language behaviour and rely instead on memories of post-natal language acquisition strategies to rediscover the universal deep structure. Furthermore, Alleyne points out:

deep structure is not an exact replica of a property in the human brain, certainly not as a set of specific linear arrangements of grammatical formatives. It may be a reasonable way of representing some property of the brain which allows humans to generate language composed of related sentences with their meanings; but the specific grammar that represents these relations and specifies their structures is a model, not a replica. (1980:134-5)

Comrie rejects innateness as an explanation for universals because 'it is not subject to any independent verification – rather, it is just a name given to the set of language universals, and using this name should not blind us to the fact that a name is not an explanation' (1981:24).

Although the genetic basis for language universals is as yet unproved (and perhaps unprovable) through empirical evidence, this is not to suggest that universals are irrelevant: some language



universals may indeed have a cognitive or, as Bates suggests, a pragmatic basis, which may in turn have a genetic predisposition. At this point, however, it is more important to recognise that universal grammar as a biological force shaping pidgin genesis is problematic as an explanatory force. As Holm puts it:

Many of us agree that universal language tendencies seem to play a role in the *selection* of features in a nascent creole...This view of the role of universals as guides rather than blueprints offers more hope for a hypothesis that might be both testable and useful. (1986:261)

Bickerton's (1981, 1984) proposition that the presence of universals in creoles reflects innate linguistic structures is less acceptable to most creolists than the possibility that universals reflect cognitive, functional or pragmatic processes in language acquisition and language learning.

Seuren and Wekker propose that semantic transparency is 'one of the factors that may be said to play an important role in creole genesis' (1986:57). Their approach, while recognising the limitations placed on current linguistic theory, is an important step in relating semantic structure to linguistic surface structure, a problematic area in transformational-generative studies of universals. According to their approach, 'semantic transparency can be seen as a property of surface structures enabling listeners to carry out semantic interpretation with the least possible machinery and with the least possible requirements regarding language learning' and that 'creole languages are characterized by a tendency to maximize semantic transparency' (1986:64). This approach incorporates the cognitive explanations proposed by Naro (1978) and Meisel (1983) to account for simplification, as well as pragmatic solutions to communication, such as 'semiotic improvisation': 'the communication strategies that learners of different proficiency levels employ in attempting to solve the problem of having to express themselves with limited linguistic means' (Seuren and Wekker 1986:58). Semantic transparency also accounts for naturalness (or markedness) theory. As Traugott (1973) suggests, language change results from the interaction of 'natural syntactic processes' (which lead to analytic, unmarked grammars) and 'natural phonological processes' (which lead to synthetic, highly marked grammars). According to this approach, pidginisation and first language acquisition rely on natural syntactic processes and so produce analytic, unmarked grammars. Creolisation and complete language acquisition, on the other hand, use natural phonological processes to restore the synthetic and unmarked features of non-pidgin and adult languages. Traugott sees universals as 'dependent primarily on linguistic neurological processes' (1981:3). The interactive perspective taken here views such 'natural syntax' as the result of communication negotiation, guided by the transparency principle outlined by Seuren and Wekker (1986).

What is especially important about Seuren and Wekker's proposal is the way in which semantic transparency incorporates both universalist and substratist explanations for pidginisation/creolisation and second language learning instead of viewing them as mutually exclusive and opposing theories:

...transparency predicts that L2 surface structures will tend to mark each significant underlying meaning element explicitly, irrespective of the facts of L1, whereas transfer predicts that L2 surface structures will directly reflect L1 structures. It must be noted that the two theories are not incompatible: it may well be that some transfer takes place but that the selection of the features transferred from L1 to L2 is determined by ST [semantic

transparency]. In fact, it is commonly held that for most second language learners both semantic transparency and transfer play a role.

...the selection made of the BL [base language, or substrate] features that are carried over into the creole may well be determined by the principle of ST, in that those features that have a high degree of ST are more likely to persist in the creole than low ST features. The two hypotheses get into conflict only when they claim exclusive rights. (1986:62-3)

### 3.6 SUMMARY

It has become increasingly common to recognise that separate explanations for pidgin and creole genesis are problematic; undoubtedly, the various explanatory forces interact in complex and subtle ways – what Mühlhäusler (1986:133) refers to as ‘developmental conspiracies’ (see also Mufwene 1986; Keesing 1988a; Holm 1986).

The position taken in this study reflects the positions of Bates (1984) and Seuren and Wekker (1986) by viewing pidginisation as a process of communicative problem-solving reliant on semantic transparency. Learners of European languages, as stated earlier, succeeded only partly, and were faced with the problem of trying to communicate using a partly-learned language. In spite of various differences in the setting, they solved the problem in similar ways by using similar strategies, and these solutions led to some of the similarities found among pidgins today. The development of jargons into pidgins is the result of solving such communication problems. Furthermore, the problem-solving process is seen as a dynamic negotiation of communication. Cross-linguistic interaction between two or more parties involves two-way input leading to new negotiated output, then agreement and normalisation of the new code.

In the beginning, learners are provided with highly perceptual lexical items such as content words, probably accompanied by extralinguistic clues to suggest their meanings. The learners pronounce these lexical items with phonological interference from their native languages, and the native speakers of the target language learn to calibrate in order to understand these same lexical items in their different phonetic forms. Eventually the native speakers' pronunciation of these lexical items may give way to that of the learners, but to begin with both parties have two versions in their grammars: the learners have the native speakers' pronunciation which they cannot produce but can understand, as well as their own versions of that pronunciation, while the native speakers have their pronunciation as well as their perceptions of the learners' pronunciation. The non-native pronunciation becomes normalised when the lingua franca is used for intragroup communication.

As the learners' lexicon increases, these content forms are conjoined to produce simple utterances. When a newly invented structure is used but not understood, reformulations of the structure may be used until successful communication occurs. Both parties, satisfied with the successful structures, add them to their grammars and the structures are normalised.

Hierarchical implications become involved because certain relationships between structures are more perceptually transparent than others and the need to communicate would work against impediments to communication. Thus, for instance, the clearest way to mark the relationships of noun phrases to verbs is (1) to separate them, as in SVO word order, or (2) to place a relational

marker between the subject and object nouns and the verb. The latter would place postpositions or suffixes between NPs and VP in SOV word order (NP-r NP-r V) or prepositions or prefixes between NPs and VP in VSO word order (V r-NP r-NP). Where *lingue franche* are concerned, these would be the expected outcomes on the basis of ease of perception. SVO word order is the obvious solution where two or more languages with different word order come in contact, since it relies on word order to mark the relationships of the NPs to the VP, automatically separating subject and object. There would be communication difficulties for both parties if affixes or function words were used when languages with conflicting word orders came into contact. For example, a preposed object marker could be misinterpreted as a postposed subject marker. If two or more languages with the same word order came into contact, one would expect similar relationship marking in the pidgin. In the case of MPE, both English and the majority of MNAN languages are SVO. To ask whether universals, English or MNAN provided this order is to deny the interactive nature of language contact situations. The first English utterances with SVO word order were accepted by Melanesians because SVO is a perceptually salient ordering of elements while also reflecting the structure of the majority of MNAN languages.

Once the first simple structures are established and such fundamentals as subject-object differentiation are settled, there is a base on which to produce (by trial and error, agreement, and adaptation) increasingly elaborated syntax concomitant with the expansion of the function of the *lingua franca* beyond the initial simple communicative needs. As the *lingua franca* is elaborated, the language begins to turn to its own lexical and structural resources, resulting in shifts in meaning (e.g. content words lose their original force and become function words) and in new structures which then lead to new developments. The process snowballs, leading to rapid change away from the original form of the *lingua franca* with the addition of inflections and function words (e.g. oblique cases, deixis, aspect, transitivity and, finally, derivational devices). These are compounded by the rise of stylistic devices which put an onus on function words to permit variation in word order, etc. This process, based on the established lexicon and structure of the incipient pidgin, alters the original form of the *lingua franca* and leads to unique structures which reflect none of the source languages but are consonant with the structure of the evolving *lingua franca*.

If, as some linguists argue, certain universal pidgin structures reflect universal grammar, then one must be able to ascertain that those structures were indeed present at the beginning:

It is not, however, easy to say what...linguistic universals are, because by the time a pidgin has stabilised sufficiently to become an effective means of communication, it has already become a complex linguistic system and has thus modified and complicated the structures that were earlier to be found in it. (Todd 1984:27)

The commonly found features of pidgins may be the result of the development outlined above, beginning with similar lexical and structural resources and similar solutions to the problem of partial learning, and not necessarily the result of universal grammar, which presupposes that certain structures have remained constant in all the pidgins sharing such features.

One solution to the problem of producing new structures is to copy one's native language. As discussed in section 3.3, the resultant calques undergo the same trial-and-error in communicative interaction, and may be accepted, rejected or reformulated according to their success. This approach

does not appeal to commonalities in deep structure reflecting universal grammar among the native languages (one need only consider surface structure to find the commonalities) but views pidginisation as the result of communicative interaction and problem solving dependent on the linguistic background of the learners and the teachers. The rejection of deep structure explanations is also expressed by Holm, in his discussion of Boretzky's substratum studies:

Boretzky's later work (e.g. 1986) focuses on a more explicit explanation of substrate influence: why some features of substrate languages survive in creoles while others do not. From a comparison of the verbal systems of Fante (and Akan language of the Kwa group) and Jamaican Creole English, he concludes that a grammatical category from the substrate was more readily transferred to the creole if the superstrate had an available morpheme to express it that (a) could be easily isolated and identified, (b) had no allomorphs that differed greatly, (c) was not homophonous with markers of other categories, and (d) was immediately translatable. Since in most cases there was no access to the deep structure rules of the superstrate language, its surface phenomena were identified, analyzed and developed in terms of known (i.e. substrate) categories. (1988:67)

The four points raised by Boretzky apply equally to Tok Pisin, such as the adoption of English *belong* as a possessive morpheme, and explain why certain substrate structures, even where widely shared, did not appear in MPE. For example, the distinction made by most MNAN languages between inalienable and alienable possession was not developed in MPE, as the lexical material from English upon which to build such a distinction was simply not 'easily isolated and identified' since English itself makes no such distinction. This applies equally to distinctions among subcategories of alienable possession, compounded by the semantic opacity of these subcategories and lack of agreement as to their lexical membership in the substrate languages themselves:

Despite the near universality of the distinction of inalienable possession in Oceanic languages, it is not surprising that this distinction is neutralized in Pacific pidgins. In this case, the universal-guided path of simplification, the neutralization of a language-family specific distinction, has been followed. The path of simplification here entails a "developmental conspiracy" in relation to superstrate speakers, to whom the alienable-vs.-inalienable distinction would have been unacceptable or opaque... I infer that this kind of neutralization of surface distinctions and markings would be a fundamental process in the formation of pidgins even in the limiting case where those who contribute to its formation all speak related languages. (Keesing 1988a:117-118)

The contact situations giving rise to pidginisation vary dramatically and may place different burdens on the various strategies for communication. In Melanesia, where many languages belong to the same language family, the outcome of pidginisation may differ drastically from situations where the native languages of the learners are markedly different and unrelated. In such situations, recourse to universals based on common-core structures among the languages involved, semantic transparency, markedness, semiotic improvisation etc., may play a more important role than I am granting to the MPE situation. In the scenario I present, however, there may be comparable 'universal' processes underlying calquing as a semiotic improvisation, such that the structurally

simplest or most semantically transparent substrate structures are chosen to be calqued, perhaps through access to a foreigner-talk register of the MNAN language involved. Foreigner-talk strategies from which universals of simplification are derived need not be restricted to the target-language speakers, but may apply, via calquing, to the substrate languages as well.

Another important factor in the linguistic outcome of contact situations, and one to which the universalist position often gives short shrift, is the sociocultural setting, as exemplified in Muysken's (1981) view of relexification. Muysken distinguishes between intergroup and intragroup communication. The former, involving the learners and the native speakers, leads to 'translexification', the gradual adoption of the entire semantic content of the native speakers' lexical items. Intragroup communication, however, involves the use of the lingua franca among speakers of similar languages and leads to relexification, the adoption from the target language of an approximate phonetic shape whose semantic value comes from the intragroup languages. (Muysken's and Bickerton's use of the term 'relexification' differs from that of Koefoed (1979) and others who apply the term to a putative Proto-Pidgin in a monogenetic theory of pidgin origins). Relexification is likely where an intermediate social identity develops for the intragroup. According to Muysken:

the African slaves spoke pidgin for inter-group communicative purposes, but at the same time relexified their native languages into the pidgin to express their new problematic cultural identity. They were not only Africans, but slaves. (1981:77)

Such intermediate identities are likely for most transplanted populations, including the Melanesians taken to foreign plantations, but can also occur among the returnees as they develop a new cultural identity based on their changed status and the cultural differences acquired while away from home. Using Muysken's approach, the pidgin used for intergroup communication in Papua New Guinea has survived only on the part of the expatriate population who speak Tok Masta, whereas Tok Pisin represents the intragroup, relexified language.

## CHAPTER 4

### PHONOLOGY

#### 4.1 INTRODUCTION

Chapters 4, 5, 6 and 7 provide a comparison between certain features of Tok Pisin grammar and those of sample MNAN languages. The aim here is to establish the possible MNAN influence on the development of MPE. The features to be examined are those which appear not only in Tok Pisin, but also in Bislama, Pijin and often in other Pacific pidgins. It can therefore be assumed that most of these features were already present in MPE. These features represent the basic building blocks upon which the three modern Bislamic languages are structured.

The material presented does not represent the entirety of modern Tok Pisin grammar, since the focus is on putative substrate-derived structures. Clearly not all of Tok Pisin syntax reflects substratum influence, since, as was suggested earlier, the MNAN languages themselves do not present a homogeneous base. It is suggested here that the features to be examined in these chapters were influenced, in the ways they developed from a limited English lexical base, by features that are common to most MNAN languages. Later developments made use of these features to expand and elaborate the language.

The bulk of the discussion focuses on Tok Pisin, but makes occasional reference to Bislama or Pijin. The focus here is on the Austronesian (AN) languages of Melanesia, although non-Austronesian (NAN) languages are found in the Solomon Islands and in Papua New Guinea, and members of these language groups may also have been involved in the plantation system. The reason for not including NAN languages in this study partly reflects the dearth of information about these languages. Furthermore, since MPE really got started in southern Vanuatu, where no NAN languages are spoken, and since AN speakers outnumber the NAN speakers in eastern Melanesia, it is clear that the most influential languages in the genesis of MPE must have been AN. It is to be noted, however, that further study might also provide evidence for a NAN input into MPE, especially those NAN languages that are similar to their AN neighbours. This is certainly the case with Anêm, a NAN language spoken in New Britain, whose syntax shares much with the AN languages of the area (Thurston 1982, 1987). Further investigations into cases of convergence between NAN and AN languages would prove valuable.

Keesing (1988a) has argued that certain non-Melanesian languages such as Rotuman, Gilbertese, Micronesian and New Caledonian languages were involved in the formation and development of a Pacific pidgin that constituted the model for MPE. This suggests, then, that these languages should equally be represented in this comparison. This is a valid point and one that needs exploration, but I shall maintain my focus on MNAN languages in this study for several reasons:

(1) While a Pacific pidgin may have been well established at the commencement of the labour trade, the lingua franca that developed on the plantations of Queensland, New Caledonia and Samoa was predominantly shaped by Melanesians. It is reasonable, then, to focus on the languages spoken in Melanesia. Keesing provides some evidence from languages outside of Melanesia to substantiate his claims of a common Eastern Oceanic syntax, but likewise turns to Solomon Islands languages, especially Kwaio, in his discussion of Pijin:

I will suggest that there is a temporal stratigraphy of substrate influences in Pacific pidgins – for this is a process that has continued through the entire period through which pidgin dialects have been learned by adults in multilingual settings. The patterns established early in Pacific pidgin, and represented in all modern dialects of Melanesian Pidgin, reflect structures broadly common to Oceanic languages. These structures tend to be preserved most strikingly in languages of the putative Eastern Oceanic subgroup from the central and southwestern Pacific. If so, then we will find some form of these patterns in any Oceanic language we choose for comparison with a Melanesian Pidgin dialect... (1988a:106)

(2) Most Melanesians involved in plantation labour had to learn the pidgin as adult speakers. Even those who were familiar with an extant Pacific pidgin were also exposed to English and to other Melanesians speaking pidgin and had to adjust to the changes these contacts effected upon Pacific pidgin. Indeed, if Melanesians learned Pacific pidgin rather than English on the plantations, it is not unlikely that this pidgin was reformulated towards a MNAN model (Keesing 1988a:104).

(3) The sandalwood and *bêche-de-mer* trades were instrumental in establishing and developing the Pacific pidgin. Since these trades already involved the islanders of southern Vanuatu, such as Erromanga, Tanna and Aneityum (Keesing 1988a:34), then some MNAN input shaped Pacific pidgin dialects prior to the labour era.

The MNAN language sample ranges from southernmost Vanuatu (Lenakel) to south-western Papua (Balawaia). In the case of Vanuatu and the Solomon Islands, representatives of most (albeit not all) language subfamilies are examined, since the languages of these islands were the 'founding members' of MPE. For Papua New Guinea, which entered the pidgin game later, five languages are examined in order to show the degree of similarity among AN languages in different parts of the country. Examples of the features in question are provided in the appendices for each section. The languages are presented in an order starting from southern Vanuatu, proceeding northwards through Vanuatu and the Solomon Islands to New Ireland, and then continuing westward across New Britain to the mainland of Papua New Guinea in a rough imitation of the likely movement of MPE across Melanesia.

## 4.2 CONSONANTS

The phonology of Tok Pisin and the other Bislamic languages is the area most heavily influenced by area-specific substrate languages, resulting in numerous regional dialects. It will be only briefly summarised here, as considerably more work needs to be done on dialect differences. The changes involved in the transition from English to Tok Pisin are described in broad generalisations, pointing

out the most common correspondences, but exceptions are not infrequent. The aim is to show in a very broad way how MNAN substratum is evinced in the treatment of English phonemes in Tok Pisin lexemes.

The consonant inventory of Tok Pisin as spoken in West New Britain is provided below for comparison with the standard English consonants:

TABLE 1: CONSONANT INVENTORIES OF TOK PISIN AND ENGLISH

TOK PISIN				ENGLISH			
<i>p</i>	<i>t</i>	<i>k</i>		<i>p</i>	<i>t</i>	<i>č</i>	<i>k</i>
<i>b</i>	<i>d</i>	<i>g</i>		<i>b</i>	<i>d</i>	<i>ǰ</i>	<i>g</i>
	<i>s</i>		<i>h</i>	<i>f</i>	<i>θs</i>	<i>š</i>	<i>h</i>
<i>v</i>				<i>v</i>	<i>ðz</i>	<i>ž</i>	
<i>m</i>	<i>n</i>	<i>ŋ</i>		<i>m</i>	<i>n</i>		<i>ŋ</i>
	<i>l</i>				<i>l</i>		
	<i>r</i>				<i>r</i>		
<i>w</i>	<i>y</i>			<i>w</i>	<i>y</i>		

The English consonants /p/, /t/, /k/, /b/, /d/, /g/, /s/, /h/, /m/, /n/, /ŋ/, /l/, /r/, /w/, /y/, contained in etyma of Tok Pisin lexical items, were generally adopted intact, as these sounds are found in most AN languages in Papua New Guinea. A few very general notes regarding changes undergone by English phonemes in their transition to Tok Pisin follow.

#### 4.2.1 VOICELESS STOPS

These present few problems in terms of Tok Pisin and English correspondences. Since these stops are not aspirated in MNAN languages, they are also unaspirated in Tok Pisin. The situation is much more complex in Bislama, where some regional variants do not distinguish between voiceless and voiced stops, according to the presence or absence of such a distinction in the languages of a given area (cf. Guy 1974:8-9; Tryon 1988a:5-6; Camden 1977:ix-x). Thus, the cognate of the invariable Tok Pisin form *pikinini* 'child' may occur in Bislama as *pikinini*, *bikinini*, *piginini* or *biginini*. Likewise, the cognates of the Tok Pisin words *de* 'day', *bel* 'belly', and *go* 'go' may occur in Bislama as *dei* ~ *tei*, *bel* ~ *pel* and *go* ~ *ko* respectively.

Since both Tok Pisin and Pijin have both series of stops, the version of pidginised English which entered the Solomon Islands and New Guinea in East New Britain had the distinction intact, otherwise the learners would not have been able to deduce which /p/, for example, represented English /p/ and which represented /b/. Nonetheless, a few lexical items in the speech of older people in West New Britain (and in other varieties of Tok Pisin) are reminiscent of the situation Guy describes for Bislama in that they have voiceless stops where voiced stops are found in standard Tok Pisin (as represented in Mihalic (1971):



WEST NEW BRITAIN	STANDARD	
<i>tete</i>	<i>tude or tede</i>	today
<i>tambolo</i>	<i>daunbilo</i>	down, under
<i>tring</i>	<i>dring</i>	drink
<i>kepis</i>	<i>kabis</i>	cabbage
<i>suka</i>	<i>suga</i>	sugar
<i>tevel</i>	<i>dewel</i>	ghost, spirit

In the last instance, however, Mihalic (1971) also has *tewel*, with a voiceless stop. In addition, most varieties of Tok Pisin have *pislama* 'sea cucumber' (from *beach-la-mar*) and *tan* 'cooked' (from *done*) which contain voiceless stops where voiced stops are expected. Laycock (1985c:297-98) discusses the substratum influence on the voiceless stops of other varieties of Tok Pisin.

#### 4.2.2 VOICED STOPS

In Tok Pisin, there are no final voiced stops as there are in English. Consequently, /t/ and /k/ occur in Tok Pisin where the English etyma have final /d/ and /g/, e.g. 'hide' > *hait* and 'dog' > *dok*. Very few English words with final /b/ found their way into Tok Pisin, with the exception of the intransitive verb *rap* 'rub' as provided by Mosel (1980:11). Informants in West New Britain rejected the intransitive form, but use both *rap-im* and *rab-im* as transitive verbs. In *rapim*, the voiceless /p/ is followed by a transitive suffix *-im*. Similarly, the transitive form of *hait* 'hide' is *hait-im*. Although this phenomenon can be explained through analogy (on the basis of verbs like *luk* 'look' and *luk-im* 'see'), it is more likely that the intransitive forms with final voiceless stops are the roots of the transitive forms. This may reflect the historical development of the suffix, such that the verb 'hide' first occurred as *hait*, and later received the suffix *-im* to produce *hait-im*. A final-devoicing rule in German may have reinforced these forms in Tok Pisin, whereas Bislama allows final voiced stops, perhaps due to the continuous presence of English in Vanuatu, for example, BISL *mared* 'married' (TP *marit*) and *dog* 'dog' (TP *dok*).

The presence of final voiced stops in MNAN languages varies considerably. In Tolai, for instance, 'voiced stops never occur in word-final position' (Mosel 1980:11). This is also the case for Lusi in West New Britain. Lusi has borrowed a number of words from Anêm, a NAN language which permits final voiced stops, but these appear as voiceless in the Lusi borrowings, e.g. ANÊM *bêxîg* LUSI *verik* 'a species of banana'. Although many Austronesian languages in Papua New Guinea do not permit final voiced stops (and many simply do not allow final consonants), there are exceptions, such as Kabana in West New Britain, which is closely related to Lusi. Kabana has lost most final high vowels (/i/ and /u/), which has resulted in words possessing final voiced stops where Lusi has voiced fricatives (LUSI /v/ = [β], /z/ = [ɹ], and /g/ = [ɣ]):

LUSI	<i>mata-gu</i>	my eye	<i>mata-zi</i>	their eyes	<i>lavu</i>	sand
KABA	<i>mata-g</i>		<i>mata-d</i>		<i>lab</i>	
	[eye-1s]		[eye-3p]			

The most influential phonological substratum in New Guinea was the Patpatar-Tolai subfamily of languages in East New Britain. MPE entered New Guinea at this point, and the phonetic form

adopted in East New Britain became the norm for all of New Britain. Similarly, this was the form that spread to the rest of the country, where it immediately began to undergo minor phonological changes. Since the Patpatar-Tolai languages, like many other AN languages in New Britain, lack final voiced consonants, no final voiced consonants entered New Britain Tok Pisin. As a result, the original English phonemes were not recoverable when this dialect spread to other areas where languages are spoken that do permit final voiced consonants; modern Tok Pisin still has only voiceless consonants in final position, although an increase in the knowledge of English, even in remote areas of West New Britain, has seen the introduction of voiced forms such as *ridim* 'read' for *ritim* and *digim* 'dig' for *dikim*; this may also account for the *rabim* ~ *rapim* variant discussed above (Goulden 1989 discusses the anglicisation of Tok Pisin in rural West New Britain).

Voiced stops are often prenasalised in Tok Pisin, especially where the Tolai dialect is influential, as it is in New Britain, although this is regionally variable. Laycock notes that 'this feature is common in Sepik and Madang Provinces, and in some dialects of Kuanua; it probably occurs in some areas in all provinces' (1985c:298). It is most clearly heard intervocalically, such as in *em i <sup>n</sup>dai* 'he died' and *em i ɲ go* 'he went'; this is lexically restricted, such that certain voiced stops are never prenasalised, such as *\*ambus* for *abus* 'meat' and *\*bangarap* for *bagarap* 'ruin, destroy'. The prenasalisation is seldom written word initially in Tok Pisin orthography, but it is fossilised in certain words in intervocalic position, e.g. *krungut* [krungut] 'crooked'. Prenasalisation has also led to some interesting compounds. In monomorphemic words derived from two English lexical items, the final consonant is dropped from the first element, and the resultant intervocalic voiced stop is prenasalised:

<i>sit down</i>	>	<i>sindaun</i>	sit
<i>put down</i>	>	<i>pundaun</i>	fall
<i>stand by</i>	>	<i>sambai</i>	save, reserve

Prenasalisation may be the result of Tolai-Patpatar influence, although the phenomenon is not uncommon among other MNAN languages, and Guy (1974:8) and Camden (1977:x) state that some dialects of Bislama also have prenasalised voiced stops. That voiced stops are prenasalised in the Tolai dialects is evident in Tok Pisin lexemes taken from Patpatar-Tolai languages, such as *tambu* 'taboo', *kundu* 'drum', *pangal* [paŋgal] 'midrib of sago palm'. Many Tok Pisin words spread with the prenasalised stops intact, especially intervocalically where they are most salient. In some instances, however, prenasalisation varies according to region and also to degree of familiarity with English. In 1988, I noted a dramatic decrease in prenasalisation in the speech of young people who know English; this is reported by Laycock (1985c:306 footnote 4) as well.

As with the presence or absence of voiced stops in Bislama, prenasalisation shows some regional variation in both Tok Pisin and Bislama. The realisation of stops as prenasalised or not correlates with the presence of prenasalised voiced stops within the substratum. Thus, since MNAN languages all appear to possess a voiceless stop series /p/, /t/, /k/, there is little variation in their occurrence in Tok Pisin and Bislama relative to English. But where /b/ occurs in English, the Tok Pisin and Bislama correspondences vary along the parameters of voice and prenasalisation. It is in these same two parameters that differences in phonological inventories occur among MNAN languages.

## 4.2.3 FRICATIVES AND AFFRICATES

The English phonemes /f/, /θ/, /ð/, /z/, /č/, /j/, /š/, /ž/ are conspicuously absent in Tok Pisin (and Bislama), having merged with other English phonemes as shown in Table 2. Although no English lexical items containing the phoneme /ž/ have been adopted in Tok Pisin, a possible exception could be *meta(im)* 'measure', if it is derived from *measure* and not *meter*. *meta* could equally be a conflation of the two words, and could even be from the German word *Meter*. This is not a form widely known in West New Britain, however, where *skelim* (from *scale*) is used.

TABLE 2: STOP AND FRICATIVE MERGERS IN TOK PISIN

ENGLISH	TOK PISIN	EXAMPLES
<i>p</i>	<i>p</i>	<i>paper</i> > <i>pepa</i>
<i>f</i>	<i>p</i>	<i>fire</i> > <i>paia</i>
<i>t</i>	<i>t</i>	<i>time</i> > <i>taim</i>
<i>θ</i>	<i>t</i>	<i>think</i> > <i>tingting</i>
<i>d</i>	<i>d</i>	<i>day</i> > <i>de</i>
<i>ð</i>	<i>d</i>	<i>this</i> > <i>dis/pela</i>
<i>s</i>	<i>s</i>	<i>sun</i> > <i>san</i>
<i>z</i>	<i>s</i>	<i>razor</i> > <i>resa</i>
<i>š</i>	<i>s</i>	<i>ship</i> > <i>sip</i>
<i>č, j</i>	<i>s</i>	<i>change</i> > <i>senis</i>

The absence of the fricatives /f/, /θ/, /ð/, /z/, /š/, and affricates /č/ and /j/ is not unexpected inasmuch as the occurrence of these phonemes is rare among MNAN languages. Few, if any, possess all these phonemes, although some individual languages may have one or two of these sounds, often only as allophonic variants.

The Patpatar-Tolai languages, like most AN languages in New Britain, lack /f/, /θ/, /ð/, /z/, /š/, /č/, /j/. Consequently the New Britain dialect of Tok Pisin has only /p/, /t/, /d/ and /s/. In Bislama (and Pijin), however, the affricates may be present. Tryon notes:

original English affricates are realised by many Bislama speakers as [s]...In some areas, however, where affricates occur in the local vernaculars, these sounds are pronounced very much as in English. Thus it is not uncommon in such areas to hear *jajem*, 'judge', *joenem*, 'join' *jioj* or *jios*, 'church'. Here too, though, j and ch are normally perceived as the same sound. Bislama speakers living in urban areas also tend to pronounce English-derived affricates as affricates, rather than /s/. Statistically, however, the great majority of ni-Vanuatu pronounce the original English affricates as /s/. (1988a:6-7)

As with the final voiced stops discussed earlier, the original English phonemes were not recoverable by the time the Rabaul dialect spread to other areas where some of these sounds do occur, since New Britain and New Ireland islanders would have reduced /č/ or /j/ to [s] if these forms were present in the pidgin learned from Solomon Islanders and ni-Vanuatu. Certain dialects of Tolai even lack /s/,

and some older speakers still use /t/ for /s/ in Tok Pisin, resulting in the collapse of minimal pairs such as *tait* 'flood' and *sait* 'side'. Laycock notes that 'in many languages in Papua New Guinea, the continuant [s] is lacking entirely, or is a member of the [t] phoneme' and that the replacement of /s/ by /t/ is 'common in many Highlands areas, in South Bougainville, and also in New Ireland and New Britain' (1985c:302); in other places 'speakers...will produce [s], [ts], [tʰ], or, occasionally, [ç]' (1985c:297). It is not unusual in West New Britain to hear people fluctuate between *sapos* and *tapos* 'if' < 'suppose', the result of the prestigious nature of the Rabaul dialect of Tok Pisin.

Although most varieties of Tok Pisin do not have /f/, this phoneme is becoming more evident in the speech of urban dwellers and of those Papua New Guineans with some knowledge of English. Anglicisms in particular tend to be borrowed with /f/ intact, although it has begun to spread to the earlier established words such as *pis* ~ *fis* 'fish' or *pinis* ~ *finis* 'completive aspect marker' < 'finish(ed)'. Hypercorrection occasionally leads to some faulty reanalyses of Tok Pisin etyma, producing, for example, *finis* instead of *pinis* 'bird' < 'pigeon'. According to Dutton and Thomas (1985:32-33) and Laycock (1985c:297), /p/ and /f/ are pronounced as [ɸ] in some areas, and Dutton (1973:1) notes that there are regional varieties that have collapsed both English /p/ and /f/ to [ɸ] instead of [p]. Both Bislama and Pijin have /f/, although its phonetic realisation is also subject to dialect variation. In Bislama, for example, /f/ is realised as [f], [ɸ], [v], [β] or [p] (Tryon 1988a:6).

The phoneme /v/ is pronounced as a voiced bilabial fricative [β] in some dialects or as [b] or [w] in others. The English-type voiced labiodental fricative [v] is uncommon in MNAN languages. The occurrence of [β] as opposed to [b] or [w] is again a regional feature dependent on the phoneme inventory of the language(s) of that region. The fricative /β/ occurs in Tolai, Nakanai, Lusi and many other AN languages of New Britain and so is found in their pronunciation of Tok Pisin lexemes. Some Patpatar-Tolai words in Tok Pisin possess this phoneme, thus *kavavar* 'ginger' is pronounced [kaβaβar] by the Lusi but [kawawar] elsewhere (cf. Mihalic 1971) and 'tree' is always *divai* [diβai] for the Lusi and never [diwai], as pronounced elsewhere. The spread of Tok Pisin from the east where [β] occurs to areas where [β] does not occur saw the rise of variation in this phoneme. Older Kabana speakers, for instance, replace /v/ with [b], as Kabana lacks labial fricative phonemes; younger people, however, use [β] like most Tok Pisin speakers in New Britain. Although the standard orthography as presented in Mihalic (1971) uses <w> in these words, I use <v> here to represent the New Britain [β] variant, since this is the form of Tok Pisin being represented in this study.

The phoneme /h/ is sometimes omitted in Tok Pisin, so that one finds *haus* 'house' pronounced sometimes as [haus] or sometimes as [aus]. This is again a phoneme that is not shared by all MNAN languages, and so it is variable in Tok Pisin, just as it is in English dialects. Some regional dialects avoid it completely, whereas others have [h ~ Ø] in variation. Lusi has /h/, but even so the Lusi often drop Tok Pisin /h/ in rapid speech. For instance, *long hap* 'over there' is usually pronounced [loŋap] and rarely as [loŋ hap] (Dutton 1973:11 notes the pronunciation as [lohap] on the mainland). If, on the other hand, *hap* occurs in isolation or utterance initially, the /h/ may occur: *hap bilong mi i kam* 'give me my portion'. In Tok Pisin one also finds /h/ at the beginning of words that have initial vowels in English (cf. Laycock 1985c:302). Thus in West New Britain one hears both *haskim* and *askim* 'ask', and *hopim* and *opim* 'open', while Dutton (1973:29) notes the pronunciation of *oda* as [honda] 'order'. This phenomenon appears to be a matter of

hypercorrection, since rules of the type  $\emptyset > h / \# \_ V$  are rare among the substrate MNAN languages (Manam being an exception). Tryon (1988a:7) notes the same variation between /h/ and / $\emptyset$ / and hypercorrection in Bislama as well.

#### 4.2.4 RESONANTS

The nasals /m/, /n/, /ŋ/ present few problems, as they are shared by most MNAN languages (but see Laycock 1985c:301 for exceptions). The same is true for /l/, /w/, /y/, with the note that some dialects of Tok Pisin do not distinguish between /l/ and /r/ (cf. Laycock 1985c:301). This is not the case in New Britain.

/r/ is a tap or trill in Tok Pisin as it is in MNAN languages. A feature of Tok Pisin as spoken in West New Britain is the marked trill realisation of /r/, in contrast with Laycock's experience:

For most speakers of Tok Pisin the phoneme /r/ is a flap, usually but not always a downward flap...In emphatic speech it may be trilled, but this does not seem a common feature. (1985c:302)

In the English dialects that were most influential in the development of MPE, /r/ does not occur pre-consonantly or finally, so /r/ is not found in words such as *hos* 'horse' and *bia* 'beer'. An exception, however, is the widespread pronunciation of *kar* 'car'. On the other hand, words that do not derive from English etyma, particularly Patpatar-Tolai borrowings, preserve /r/ in these same positions: *yar* 'Casuarina', *purpur* 'flower', 'skirt', *kavavar* 'ginger'. Intervocalic /t/ and /d/ which are flaps in some dialects of English are sometimes reflected by Tok Pisin /r/: *wara* 'water' (but BISL *wota*), *paura* 'powder' (but BISL *paoda*) and exceptionally *param* 'fathom' (but BISL *fatom*).

#### 4.2.5 CONSONANT CLUSTERS

English consonant clusters in initial position are often broken up by an epenthetic vowel in Tok Pisin reflexes and in Bislama (Tryon 1988a:9-10), as in *siton* ~ *ston* 'stone'. There is now a trend among younger people towards re-establishing the English forms. This variation is not only substrate-related (many MNAN languages have little tolerance for consonant clusters), but currently it also distinguishes between younger and older generations (see also Laycock (1985c:303) and Pawley (1975)).

Final consonant clusters in English etyma usually lose the final consonant in Tok Pisin, as in:

	<i>hand</i>	>	<i>han</i>	arm, hand
	<i>stink</i>	>	<i>sting</i>	rotten
but:	<i>milk</i>	>	<i>melek</i>	semen

In English etyma with final /ns/ and /ks/, however, both consonants are often preserved by the presence of an epenthetic /i/, as in:

<i>ants</i>	>	<i>anis</i>	ant
<i>change</i>	>	<i>senis</i>	change
<i>axe</i>	>	<i>akis</i>	axe
<i>box</i>	>	<i>bokis</i>	box

Younger generations do not seem to be re-establishing these final clusters, so that these forms may remain fossilised as they currently are.

#### 4.3 VOWELS

The development of English vowels into Tok Pisin vowels is not nearly as regular as is the development of the consonants. As linguists well know, it is the vowels of English that reflect the greatest divergence among English dialects. Similarly the Tok Pisin reflexes of the vowels of English do not pattern very regularly. Part of the problem for Melanesians learning English was not just that many English vowels lack counterparts in their native languages, but that the English speakers from whom they heard and tried to learn the language probably varied considerably in the vowels they used. For instance, we can assume that a number of different English dialects were represented among the crews of traders, whalers, plantation recruiters and plantation bosses. Furthermore, the Australian dialects must have played a role both in Queensland and on the islands where Australians settled or governed, as reflected by the Tok Pisin vowels in *naim* 'name', *pilai* 'play' and *aitpela* 'eight', which is how they are pronounced in West New Britain (and not simply a spelling convention based on words like *rain*). These are now often pronounced as *nem*, *plei* and *etpela*, especially by those with a knowledge of English. The pronunciation of words such as *pelet* ~ *plet* 'plate', *de* 'day' and *wet* 'wait' suggest, however, that the /ai/ variant was limited in its lexical distribution.

The following changes from English to Tok Pisin are very general, reflecting only the most common correspondences, and are largely based on Laycock's (1985c:296) discussion of English and Tok Pisin vowels:

- (1) English /iy/ and /i/ become Tok Pisin /i/

<i>sheep</i>	>	<i>sipsip</i>	sheep
<i>key</i>	>	<i>ki</i>	key
<i>ship</i>	>	<i>sip</i>	ship
<i>fish</i>	>	<i>pis</i>	fish

- (2) English /ey/, /e/ and /æ/ become Tok Pisin /e/

<i>plate</i>	>	<i>pelet</i> ~ <i>plet</i>	plate
<i>sail</i>	>	<i>sel</i>	sail
<i>neck</i>	>	<i>nek</i>	neck, throat
<i>leg</i>	>	<i>lek</i>	leg, foot
<i>can</i>	>	<i>ken</i>	can
<i>bank</i>	>	<i>beng</i>	bank

- (3) English /æ/, /a/, /a:/, and /ɐ/ become Tok Pisin /a/
- |              |   |                  |              |
|--------------|---|------------------|--------------|
| <i>fat</i>   | > | <i>pat(pela)</i> | fat          |
| <i>must</i>  | > | <i>mas</i>       | must         |
| <i>cargo</i> | > | <i>kago</i>      | cargo, goods |
| <i>hot</i>   | > | <i>hat</i>       | hot          |
- (4) English /ɒ/, /ɔ:/, /ɜ/, /ə:/ and /ow/ become Tok Pisin /o/
- |              |   |             |       |
|--------------|---|-------------|-------|
| <i>dog</i>   | > | <i>dok</i>  | dog   |
| <i>law</i>   | > | <i>lo</i>   | law   |
| <i>work</i>  | > | <i>wok</i>  | work  |
| <i>dirty</i> | > | <i>doti</i> | dirty |
| <i>no</i>    | > | <i>no</i>   | not   |
- (5) English /ʊ/ and /uw/ become Tok Pisin /u/
- |              |   |                    |             |
|--------------|---|--------------------|-------------|
| <i>book</i>  | > | <i>buk</i>         | book        |
| <i>sugar</i> | > | <i>suka ~ suga</i> | sugar       |
| <i>moon</i>  | > | <i>mun</i>         | moon, month |
| <i>too</i>   | > | <i>tu</i>          | too, also   |
- (6) The English diphthongs /ay/, /aw/, /oy/, /ɪə/ and /eə/ become Tok Pisin /ai/, /au/, /oi/, /ia/ and /e/ respectively
- |              |   |             |       |
|--------------|---|-------------|-------|
| <i>light</i> | > | <i>lait</i> | light |
| <i>town</i>  | > | <i>taun</i> | town  |
| <i>boil</i>  | > | <i>boil</i> | boil  |
| <i>beer</i>  | > | <i>bia</i>  | beer  |
| <i>where</i> | > | <i>we</i>   | where |

At the phonetic level, Laycock (1970:xiii) describes ten vowels in coastal varieties of Tok Pisin, [i], [ɪ], [e], [ɛ], [a], [a:], [ɐ], [o], [ʊ], and [u], and adds two more, [ɔ] and [ɜ], in his (1985c) article to cover the range of possible regional variants. Mihalic (1971:4) gives nine phonetic realisations for the Madang variety of Tok Pisin: [i], [ɪ], [e], [ɛ], [a], [ɔ], [o], [ʊ] and [u], and Wurm (1971:5) has seven for Highlands Tok Pisin: [a], [e], [ɛ], [i], [o], [ɔ] and [u]. At the phonemic level, however, the distinctiveness between or among members of the following sets is marginal: (1) /i/ and /ɪ/; (2) /e/ and /ɛ/; (3) /a/ and /a:/; (4) /ɐ/, /ɜ/, /ɔ/ and /o/; and (5) /u/ and /ʊ/. As Laycock observes:

...minimal pairs are few, so that the pronunciation of speakers who are using more vowels than the basic five usually goes unnoticed – whether the extra vowels come from the superstrate English, or from substratum languages. (1985c:302)

An example of a possible minimal pair is [hat] 'hot' and [ha:t] 'hard' (Laycock 1970:xiv), but these are not distinguished in West New Britain Tok Pisin, both occurring as [hat]. In fact, young Lusi speakers often use the Lusi word *oanana* 'hot' to also mean 'hard', for which there is no Lusi term. This is clearly a calque from the homophonous Tok Pisin term *hat* 'hot', 'hard'.

Laycock notes that 'the core phonology of Tok Pisin is taken as having five vowels' (1970:xiv), and these five (*i, e, a, o, u*) have become the standard for writing the language, as represented in Mihalic's (1971) dictionary of Tok Pisin. The extra vowels in the dialects of Tok Pisin described by Laycock, Wurm and Mihalic generally reflect the vowels of the English etyma, made possible by the phonological rules of substrate languages and by knowledge of English. In north-west New Britain, any vowel generally has a wide range of height variation, both in the substrate languages with which I am familiar, and in Tok Pisin. The vowel in *bet* 'bed' may be as low as [ɛ] or as high as [e] and that in *longpela* 'long', 'tall' may vary from [ɔ] to [o]. Nonetheless, there is no phonemic contrast between [e] and [ɛ] in West New Britain Tok Pisin.

MNAN languages do not diphthongise /i/, /e/, /o/ and /u/ and consequently the English diphthongisation of /iy/, /ey/, /ow/ and /uw/ is not found in Tok Pisin. Vowel length does not play a role in most Tok Pisin dialects.

The Tok Pisin diphthongs /au/, /ai/ and /oi/ are usually realised phonetically as [aɔ], [aɛ] and [oɛ] in north-west New Britain. It is unknown at this point how widespread the [aɔ], [aɛ] and [oɛ] realisations are, or whether they are simply regional; it is noteworthy, however, that these diphthongs are commonly written as /ao/, /ae/ and /oe/ in Bislama and Pijin orthographies (cf. Camden 1977, Tryon 1988a and Keesing 1988a). In north-west New Britain, an interesting difference between the [aɪ] and [aɛ] diphthongs is manifested in the phonetic realisation of the irrealis marker *bai* either as [baɪ] or as [baɛ]. The [aɪ] realisation occurs when the irrealis marker is followed by the subject referencing pronoun *i*. In this case, *bai* + *i* coalesces into *bai* [báɪ]. An alternate analysis, that the sequence *bai* + *i* has been reinterpreted as *ba* + *i* to produce [baɪ], does not appear to apply here, since the pronoun *i* may also be realised as a full vowel in careful speech: [baɪ i]. When the irrealis marker *bai* is not followed by the subject referencing pronoun *i*, it is most commonly pronounced as [baɛ], as in *bai man i kam* [baɛ man i kam] 'the man will come' or *bai ol i kam* [baɛ ol i kam] 'they will come'. The result is that, in rapid speech, the subject referencing pronoun *i* appears to be dropped in an utterance such as *bai i kam* [baɪ kam] 'he/she/it will come'. Nonetheless, the pronoun is recoverable after *bai* by virtue of the realisation of the diphthong as [aɪ]. The researcher whose ear is not attuned to the difference between the diphthongs [aɛ] and [aɪ] may mistakenly be led to the conclusion that *i* does not occur in this environment. Since the phonetic realisation of /ai/ is predictable in north-west Tok Pisin and since there is no phonemic contrast between, for example, [aɪ] and [aɛ], the standard usage of /au/, /ai/ and /oi/ to write these diphthongs is maintained here.

The reduction of the complex English vowel system to a five-vowel system clearly represents substratum influence. Although there are a number of MNAN languages with more complex vowel inventories, especially at the phonetic level, the five that remain in Tok Pisin represent the common inventory of most MNAN languages, and the survival of the other vowels was doomed from the beginning by the presence of people whose vernacular languages lacked those vowels and who simply could not pronounce them. Certainly by the time MPE reached East New Britain, the Patpatar-Tolai substratum would have levelled the English vowel system (if it had even survived) to the five core vowels shared by these languages.

In summary, the English vowel system, which differentiates among eleven or more vowel phonemes, has been reduced to five vowel phonemes in Tok Pisin. These five vowels represent the



vowels common to the majority of MNAN languages. It is possible that regional varieties of Tok Pisin possess much richer phonetic inventories of vowels, reflecting underlying phonetic distributions of the vowels of substrate languages and knowledge of the original English vowels. Nonetheless, the five-vowel system used in Mihalic's orthography of Tok Pisin is true to the phonemic status of these vowels. Standardisation of competing writing systems for Tok Pisin are most problematic at the consonant level which shows greater variation than in the case of vowels. Although this situation is the reverse of English, whose dialects differ most in the vowels and whose consonants are relatively stable, it appears to mirror the MNAN languages in which dialect differentiation is most evident in consonant variation.

#### 4.4 SUMMARY

The minor dialectal and sociolectal variations in pronunciation described above seem to pose few problems for communication. In Papua New Guinea and in other parts of Melanesia, multilingualism is widespread, and dialect differentiation is common even within small language groups. Papua New Guineans interact daily with others who speak different dialects of the same language or even different languages. In fact, linguistic variation may have an emblematic function:

The cause[s] of this linguistic differentiation, at the dialect level, lie in Melanesian social organisation and Melanesian attitudes to language. It has more than once been said to me around the Sepik that 'it wouldn't be any good if we all talked the same; we like to know where people come from'. In other words, linguistic diversity, of however minor a kind, is perpetuated, as a badge of identification. (Laycock 1982:34)

Similar regional variation also occurs in Tok Pisin and appears to reflect this Melanesian attitude towards diversity. The form of Tok Pisin that a person speaks in Papua New Guinea informs the hearer of that person's regional origins. Thus Lusi-speakers who prenasalise voiced stops, in contrast to a mainlander who does not, sees this prenasalisation as an emblem of their cultural background: 'I am an Islander, not a Highlander'. This feature in conjunction with others, like the realisation of /v/ as [β] and trilled /r/, indicates further that the speaker comes from New Britain. Such variation does not threaten the function of Tok Pisin as a lingua franca, since the variants themselves differ too little from each other to impede communication and since these same variants are encountered daily in the vernacular languages and their dialects. Instead, the variation affirms regional affiliation. What is of particular interest is the way substrate influence not only affects the form of Tok Pisin one speaks, but also influences linguistic attitudes towards variation.

Laycock suggests, however, that 'the "regional accent"...does not serve as a unifying regional feature, and so does not acquire the status of a dialect' (1985c:304) because (1) it is difficult to identify variants common to a whole region when 'speakers from the same region may have very different substratum linguistic input, and share no "dialect" features in common' (1985c:304); and (2) 'accent' is restricted to older Tok Pisin speakers, whereas young people and those who have travelled extensively lose their local accent through levelling processes. These are valid points, but as I point out in Goulden (1989), the islands of New Britain, New Ireland, Manus and the Siasis share a long history of speaking Tok Pisin together on the plantations of New Britain and New Ireland. Local

features have been largely levelled by this interaction (but see Chowning 1983), and the research I conducted in West New Britain in 1988 suggests strongly that there is a relatively homogeneous islands standard (largely based on Patpatar-Tolai influence) of which the people of New Britain are quite proud. Their association with islands Tok Pisin reflects a political and historical distinction that islanders make between themselves and Papua New Guineans from the mainland. That attitude is part of my reason for maintaining the spelling of words like *divai* with a <v> instead of the mainland standard *diwai*.

Currently, however, another levelling process is taking place, due to the spread of English throughout the country and its effect on Tok Pisin (Goulden 1989). There has been a dramatic increase in the knowledge and use of English even in rural settings such as West New Britain, due to the fact that more and more young people have some schooling in which English is taught. English holds the prestige and the functional role that were once associated with Tok Pisin, and one result of this change in status has been the anglicisation of Tok Pisin, particularly evident in the lexicon and phonology. A second result of education has been the increased influence of standardisation in Tok Pisin, which itself often has an English bias, e.g. the pronunciation of *tete* 'today' as *tude*, the loss of epenthetic vowels (as in *supia* ~ *spia* 'spear') and a decrease in prenasalisation (as in *i dai* 'she/he fainted' instead of *i ndai*). It is because of a similar rise in standardisation and anglicisation in Vanuatu and the Solomon Islands that researchers such as Tryon (1988b) and Keesing (1987, 1988a) focus on 'bush' varieties of Bislama and Pijin which conserve archaic material and thus provide valuable insights into the history and development of MPE in Melanesia. Today, sociolectal variation between 'bush' and 'urban' Tok Pisin indicates the degree of affiliation to traditional village life or to modern urban life and Europeanisation, and this has produced some communication and identity conflicts between older and younger people.

The effect of substratum on the realisation of English etyma is quite apparent when rural or bush Tok Pisin is compared with English and with MNAN languages. The consonant charts given below indicate three areas of reaction: (1) consonants in bold are present in most MNAN languages; (2) English consonants underlined are widely lacking in MNAN languages; and (3) English consonants in brackets are variable in occurrence in MNAN languages. (The Tok Pisin consonants in brackets show dialectal variation.)

TABLE 3: TOK PISIN AND ENGLISH CONSONANTS RELATIVE TO MNAN CONSONANTS

TOK PISIN			ENGLISH			
<b>p</b>	<b>t</b>	<b>k</b>	<b>p</b>	<b>t</b>	<b>č</b>	<b>k</b>
(b)	(d)	(g)	(b)	(d)	ǰ	(g)
(f)	s	(h)	(f)	<u>θ</u> s	š	(h)
(v)			(v)	<u>ð</u> <u>z</u>	ž	
<b>m</b>	<b>n</b>	<b>ŋ</b>	<b>m</b>	<b>n</b>		<b>ŋ</b>
	<b>l</b>			<b>l</b>		
	<b>r</b>			<b>r</b>		
<b>w</b>	<b>y</b>		<b>w</b>	<b>y</b>		

A comparison of these two charts shows the following: (1) where English and MNAN languages share similar phonemes (e.g. /p/), these occur in Tok Pisin and are relatively invariant; (2) where English has consonants that are lacking in most MNAN languages (e.g. /θ/), these consonants are lacking in Tok Pisin; and (3) where English consonants have correspondences in some MNAN languages but are lacking in many others (e.g. /f/), there is variation in the realisation of that consonant in Tok Pisin.

## CHAPTER 5

### THE NOUN PHRASE

#### 5.1 INTRODUCTION

The discussion that follows focuses on two central features of the Tok Pisin noun phrase: the plural marker *ol* (PIJN *olgeta*, BISL *ol*) and nominal adjuncts to noun phrases. In Tok Pisin, unlike English, there are no nominal affixes.

#### 5.2 PLURAL MARKING

##### 5.2.1 PLURAL MARKING IN TOK PISIN

Plurality in Tok Pisin is marked in the noun phrase by the free morpheme *ol* which precedes the noun. This morpheme is identical in form to the third person plural pronoun. When plurality is marked by a numeral or by *olgeta* 'all', 'every', the plural morpheme *ol* is not generally used, and its use is optional when other quantifiers such as *planti* 'many' and *sampela* 'some' are present. Marking of the plural is variable relative to the animacy of the noun in that, in some dialects and sociolects, inanimate nouns are optionally marked for plural.

*ol man*  
pl man  
men, the men

(*ol*) *haus*  
(pl) house  
houses, the houses

*tripela pikinini*  
three child  
three children

*olgeta meri*  
all woman  
all the women; every woman

(*ol*) *sampela dok*  
(pl) some dog  
some dogs

(ol) *planti man*  
 (pl) many man  
 many men

*ol* following a name is used to indicate a person and his/her group:

*Bikbel ol*  
 Bikbel pl  
 Bigbelly and his friends

## 5.2.2 PLURAL MARKING IN MNAN LANGUAGES

In MNAN languages, nouns are unmarked for number, although many have the option of marking plural within the noun phrase. A few languages have no plural marking within the noun phrase, although all mark plurality of subject, object and possessor by the use of obligatory subject, object and possessive pronouns. Some languages also have lexicalised plurals for certain [+human] nouns. In Lusi, for instance, the word *tanta* 'man' has a plural *pana* 'men', while *kekele* means either 'child' or 'children' depending on the third person pronoun associated with it:

- |      |                                 |
|------|---------------------------------|
| LUSI | <i>kekele i-kaliṇa</i>          |
|      | child 3s-play                   |
| TP   | <i>pikinini i pilai</i>         |
|      | child sr play                   |
|      | the child is playing            |
| LUSI | <i>kekele ti-kaliṇa</i>         |
|      | child 3p-play                   |
| TP   | <i>ol pikinini (ol) i pilai</i> |
|      | pl child (3p) sr play           |
|      | the children are playing        |
| LUSI | <i>ṇa-kona kekele</i>           |
|      | 1s-see child                    |
| TP   | <i>mi luk-im pikinini</i>       |
|      | 1s see-tr child                 |
|      | I saw the child                 |
| LUSI | <i>ṇa-kona-zi kekele</i>        |
|      | 1s-see-3p child                 |
| TP   | <i>mi luk-im ol pikinini</i>    |
|      | 1s see-tr pl child              |
|      | I saw the children              |
| LUSI | <i>kekele e-le izo</i>          |
|      | child 3s-poss spear             |
| TP   | <i>supia bilong pikinini</i>    |
|      | spear poss child                |
|      | the child's spear               |

LUSI	<i>kekele</i>	<i>le-zi</i>	<i>izo</i>
	child	poss-3p	spear
TP	<i>supia</i>	<i>bilang ol</i>	<i>pikinini</i>
	spear	poss	pl child
	the children's spear(s)		

Among the MNAN languages that do mark nominal plurals in any consistent manner, plurality in the noun phrase is most often associated with [+human] or at least [+animate] nouns. If inanimates are pluralised in a given language, then it follows that animates are also pluralised. Thus the animacy hierarchy: [+human] < [+animate] < [+inanimate] appears to be valid for MNAN languages.

Plurality is marked in various ways in MNAN languages, and in some languages more than one of the structures described below may be found:

(1) The third person plural pronoun (and sometimes the dual or trial form) is used to indicate plurality, occurring either as a focal pronoun preceding the noun or as a possessive pronoun suffixed to the noun or to the adjective accompanying the noun. In Kwaio, the third person plural pronoun may be used with kin terms. In Lusi the third person plural pronoun is occasionally used with plural animate nouns:

LUSI	<i>asizi</i>	<i>ai-nat=natu</i>
	3p	3s-rd=child
TP	<i>ol pikinini</i>	<i>bilang-en</i>
	pl child	poss-3sg
	his children	

(2) A number of MNAN languages have a plural morpheme which differs from the third person plural pronoun. This is a free morpheme in most of these languages, although Sie and other languages of Erromanga have both a prefixed and a suffixed morpheme, the former marking a collective, the latter a definite plural. Collective morphemes are also found in some Solomon Islands languages.

TOLA	<i>a umana bul</i>	
	nm pl	boy
	(Mosel 1980:116)	
TP	<i>ol manki</i>	
	pl	boy
	the boys	

(3) Reduplication of the noun or an accompanying adjective is used in some MNAN languages to indicate plurality (in the following examples the reduplicated portion of the lexeme is separated from the root by the use of /=/). In West New Britain, a reduplicated Tok Pisin plural *lap=lapun* 'old people' from *lapun* 'old man', 'old woman' is quite commonly heard.

LUSI	<i>tamine</i>	<i>pa=pazo</i>
	woman	rd=big
TP	<i>ol bikpela meri</i>	
	pl	big woman
	adult women	

Tok Pisin also makes use of reduplication to indicate that 'a considerable number of what is referred to by N are involved' (Mühlhäusler 1979:416f). Most reduplicated nouns in Tok Pisin,

however, refer to collectives or to distributives, as also in some MNAN languages; plurality alone is not usually marked by reduplication in Tok Pisin (with a few exceptions, such as *laplapun* 'old people').

LUSI	<i>ahe-mu vot=voto</i> leg-2s rd=sore
TP	<i>lek bilong yu i sua=sua nabaut</i> leg poss 2s sr rd=sore around your leg is covered with sores

Some MNAN languages use a third person plural pronoun with an individual's name or a [+human] noun to indicate a person and his group:

NAMB	<i>hir a Kalpau</i> 3p nm Kalpau	(Fox 1979:35)
TP	<i>Kalpau ol</i> Kalpau pl Kalpau and his friends	
SA'A	<i>kiraa Dora</i> 3p Dora	(Ivens 1918:145)
TP	<i>Dora ol</i> Dora pl Dora's people	
TOLA	<i>Pater dital</i> Father 3p	(Mühlhäusler 1980a:43)
TP	<i>Pater ol</i> Father pl the priest and his flock	
NAKA	<i>e Tubu mite</i> nm Tubu and:3p	(Johnston 1980:186)
TP	<i>Tubu ol</i> Tubu pl Tubu and the rest	
LUSI	<i>Solou masizi</i> Solou and:3p	
TP	<i>Solou ol</i> Solou pl Solou and his group	

Table 4 summarises the plural markers found in the sample MNAN languages; examples are provided in Appendix III.

TABLE 4: PLURAL MARKING IN MNAN LANGUAGES

	3P PRONOUN		PLURAL MORPHEMES		REDUPLICATION
	3p (+ N)	(N +) 3p	pl (+ N)	(N +) pl	
LENA	-	-	-	<i>miin</i>	-
TANN	-	-	-	-	-
SIE	-	-	<i>ov-</i>	<i>-su</i>	-
NGUN	-	-	<i>maana</i>	-	+
PAAM	-	<i>kaile</i>	-	-	-
AMBR	-	<i>ŋe</i>	-	-	-
PORT	-	-	-	<i>ŋail</i>	-
NAMB	-	-	-	-	-
TANG	<i>la</i>	-	-	-	+
RAGA	<i>ira</i>	-	-	-	-
MOTA	-	-	<i>taure</i>	<i>ŋaŋ</i>	+
AROS	<i>iraa</i>	-	<i>mwani</i>	-	+
SA'A	-	-	<i>mu</i>	-	-
KWAI	<i>gila</i>	-	<i>ni</i>	-	-
LONG	<i>ingira</i>	-	-	-	-
VATU	<i>hira</i>	-	-	-	-
NGGE	<i>ŋgaira</i>	-	-	-	-
BUGO	<i>iira</i>	-	<i>komi; koi</i>	-	-
TIGA	-	-	<i>mamana</i>	-	-
TOLA	-	-	<i>umana</i>	-	+
NAKA	<i>egite</i>	-	-	-	+
LUSI	<i>asizi</i>	-	-	-	+
MANA	-	<i>-di</i>	-	-	+
BALA	-	<i>-ria</i>	-	-	-

## 5.2.3 DISCUSSION

The uninflected plural of Tok Pisin parallels plural marking in most MNAN languages. Mosel suggests that 'though this unmarkedness is found in Patpatar-Tolai as well, it cannot be regarded as the result of substratum influence, since the reduction of morphological complexity is a pidgin universal' (1980:40). While such unmarkedness may represent a high-frequency occurrence among pidgins (especially among European-based pidgins, but not necessarily among non-European-based pidgins), it does not negate the influence of substrate as an explanation for its absence in Tok Pisin. Given that inflectional plurals are rare and unusual in MNAN and other Oceanic languages, it cannot be expected that learners would deduce the presence of an inflectional suffix in English and adopt it readily in the sociolinguistic conditions which gave rise to MPE.

The explanation lies more realistically in the interaction between partial learning and substratum influence. The productive English plural suffix {-Z} and its morphologically-conditioned allomorphs, as well as the homophonous forms of the genitive suffix {-Z}, are not easily acquired in the initial stages of learning English. Although a few fossilised plurals such as *anis*, 'ant' < 'ants', *tit*, 'tooth' < 'teeth' (but BISL *tut* < 'tooth'), *masis*, 'match' < 'matches', *kokonas*, 'coconut' <



'coconuts', and *bis*, 'beads' < 'beads' survive in Tok Pisin, these lexemes cannot be parsed into two morphemes (a root and a plural suffix) as can their English etyma.

Partial learning was the result of various factors, including the impoverishment of the linguistic model, the alien nature of the affixes themselves, and the complications these affixes presented to the learner. If the people who brought English to Melanesia (many not even being native speakers of the language) were already familiar with previous forms of pidginised English as spoken elsewhere in the Pacific, in the Atlantic or in South-east Asia, then it is likely that they brought such forms of English into play in their encounters with Melanesians; hence the 'foreigner talk' or Pacific pidgin they employed was already lacking much of the affixation that is so problematic for any learner of English, even for other Europeans. Furthermore, the contact itself rarely provided prolonged exposure to the niceties of standard English. Mühlhäusler, in his research of the earliest sources and exemplars of pidginised English in the Pacific, found that Europeans' pidgin before 1900 was remarkably inconsistent regarding plural marking (Mühlhäusler 1980a:39) and the same inconsistencies appeared in 'foreigner-talk' tests he administered. Such inconsistencies, he suggests, result in the fossilised plurals listed above.

In addition, the bound morphemes representing plurality in English are quite different in nature from the means used by MNAN languages to express plurality. Plurality in English is obligatory, often redundant, and its form is complex in that there are several means of marking plurality which are morphologically conditioned, e.g. boy/boys, man/men, foot/feet. In MNAN languages, plurality may or may not be marked; it is variably present when it is redundant, and sometimes it applies only to [+animate] or even just [+human] nouns. The means of marking plurality varies among MNAN languages as well. Even when it involves suffixation it differs from the English use and syntax of plural suffixes. In some MNAN languages, the plural suffix is similar to the third person plural possessive suffix (*their*). Although the English plural suffix {-Z} and the English genitive suffix {-Z} happen to be homophonous, neither indicates third person plural marking. MNAN-speakers learning English might mistakenly expect the plural suffix and the genitive suffix to be the same as the third person plural form, given that they even get as far as isolating the suffix.

Consequently, it is unlikely that learners of English could easily isolate (or even try to isolate) the plural in the model, given that they had a model that was full enough to allow the suffix to be parsed from the root. Furthermore, the learning of the English plural was plagued by the fact that the most productive morpheme, {-Z}, has three allomorphs: [s], [z] and [əz]. As shown in sections 4.2.3 and 4.2.5, the phonological changes undergone by English in the earliest stages of pidginisation collapsed [s] and [z] and reduced final consonant clusters, thus wiping out the allomorphy needed to speak English competently. The marking of plurality in MPE was fulfilled by the incorporation of free morphemes on the model of MNAN languages.

Mühlhäusler (1980a), who traces the development of Tok Pisin from Samoan Plantation Pidgin, proposes the following development of plural marking from its beginnings, through the stabilisation period, to the final choice of *ol*. In its early stages, Samoan Plantation Pidgin appeared to have no overt plural marking, even in the pronominal system. As Mühlhäusler notes, this is not unexpected, since in the early stages of second language learning, functors such as plural are lacking, but appear later. In the formative period, however, there may be attempts to mark plurality where disambiguation is called for, and in MPE three formatives were in competition: *-pela* < 'fellow', *ol* < 'all' and *olgeta* < 'altogether'. The first two were also competing for plurality in the pronouns. Plurality was not marked redundantly, that is, when contextual information provided the semantic notion of plurality.

In the stabilisation phase, *ol* was replaced by *-pela* in the pronominal system, producing *mipela* 'we (exclusive)', *yupela* 'you (plural)' and *hipela* (or *empela*) 'they'. The last, competing also with *ol* and *olgeta* as 'they', was eventually replaced in Tok Pisin by *ol*, and *olgeta* came to mean 'all'. At this stage, pluralisation remained optional, but over time its usage increased. Mühlhäusler relates the appearance of *ol* as a plural marker to two major parameters: (1) a hierarchy of semantic preference in the order (a) humans, (b) animates, (c) count nouns, (d) mass nouns; and (2) a hierarchy of syntactic preference – (a) subject, (b) direct object, (c) after the preposition *long* (locative or direct object), and (d) after the preposition *bilong* marking relationships between nouns. Redundancy was still kept to a minimum: at first, *ol* did not co-occur with *olgeta* 'all', *sampela* 'some', *kainkain* 'various kinds' or with numbers, and in enumerations only the first noun was preceded by *ol*.

The redundant use of *ol* may have been influenced by written missionary translations which tended to use plural marker *ol* more consistently. This would be an interesting example of European adstratum, inasmuch as the Germans at that time treated Tok Pisin as a second language (whereas English speakers treated it as 'baby-talk'), but they imposed the European need for a redundantly marked, obligatory plural.

At this point a well-defined system of pluralisation in Tok Pisin developed. The emergence of the tactic 'one meaning – one form' regularised the free variation and random use of the competing forms *-pela*, *ol* and *olgeta* found in the earlier stage. The chosen form, *ol*, spread to more and more semantic and syntactic environments until today there is much redundant use of the plural marker with virtually any noun, although there is still sociolectal and regional variation in this area.

Mühlhäusler's scenario has come under attack by Keesing, who first notes that 'we find this pattern of pluralizing nouns with the third-person plural pronoun in Bislama and Solomons Pidgin as well as Tok Pisin' (1988a:127). This indicates that the plural marking system was developed before Tok Pisin began to differentiate from its sister languages, that is, before 1880. Keesing points out the use of *ol* or *olgeta* as plural markers with [+human] nouns in texts as early as 1851, in other words, as early as the use of these forms as a third person plural pronouns: 'This use long antedates the separation of the Tok Pisin lineage. Much of Mühlhäusler's developmental interpretation, presented as confined to the Tok Pisin lineage, is hence quite irrelevant' (1988a:129). This does not suggest, however, that the developmental sequence involving the use of Tok Pisin *ol* as a plural marker with [+human] then [+inanimate] nouns and its spread throughout syntactic frames is invalid. Rather, it suggests (1) that the use of the plural markers *ol* and *olgeta* had developed before MPE separated into the modern Bislamic languages; and (2) that it is unclear whether *ol* and *olgeta* began as third person pronouns whose use was extended to marking plurality of [+human] nouns, or vice versa, or simply that both functions developed concurrently. Nonetheless, Keesing's analysis of the pronominal system appears to suggest that plural marking preceded pronominal usage (see section 7.2).

Walsh (1978:188) relates the Tok Pisin use of *ol* as a plural marker (identical in form to the third person plural pronoun) to the Raga use of *ira* which also represents a third person plural pronoun. Mühlhäusler rejects Walsh's substratum explanation for *ol* due to:

...his use of a static comparative model to determine relationships between a pidgin language and its lexifier and substratum languages. He ignores the fact that the number marking system of present-day Tok Pisin is not a simple continuation of plural marking in the days of early contact but the result of developments that proceed along lines not found

in the early substratum languages. My view is that the similarity between Tok Pisin and Raga is a chance one (though explicable in terms of universal conventions for plural marking) and not due to shared history. (1980a:40)

The criticism that 'universal' explanations supersede substrate explanations merits discussion. In the model being proposed here, the following scenario is suggested: the learning of the complicated English plural system was untenable in the circumstances involved, and so English plural marking did not survive in MPE. In the earliest stages of the lingua franca, this semantic distinction may have been unnecessary, but as the language grew, Melanesians felt a need to produce a plural distinction that they themselves knew from their own languages. Given the material available to them at that time, the prime candidates were a suffix, *-pela*, and two free morphemes, *olgeta* and *ol*, although, as Keesing shows, the last two were already well in place when Melanesians appeared on the scene in large numbers.

Given the restriction of English lexical material to choose from, the plurality indicated by an English term like 'all' or 'altogether' was semantically transparent (even if its English semantic content was not). The choice of a free morpheme over a suffix, however, is relevant in that many MNAN languages, especially in Vanuatu, have a free plural morpheme, whereas the *-pela* suffix was ultimately restricted to pronominal forms, just as many MNAN languages create dual, trial or plural pronouns with suffixes. The widespread agreement among MNAN languages in marking plurality with a form comparable to the third person plural led Pawley (1972, 1973) to reconstruct the plural in PEO and in POC as a third person plural form *\*ida*:

POC	<i>*ida</i>	<i>na</i>	<i>papine</i>	
	3p	nm	woman	(Pawley 1973:112)
TP	<i>ol</i>	<i>meri</i>		
	3p	woman		
		the women		

That the form chosen, *ol(geta)*, came to represent both the plural morpheme and the third person plural pronoun was not merely a drive guided by universals; a similar semantic connection in many MNAN languages shows that substratum was influential in the choice and maintenance of that connection. At the same time, substratum helps explain why the forms *hipela* and *empela* 'they' were lost. Although *hipela* and *empela* make the pronominal paradigm much more regular (a universal of simplification), a relationship between the third person plural pronoun and the plural marker was preferable to the Melanesians.

Once speakers had opted for *ol(geta)*, it filled both slots, and was then extended to use as a group plural: *Pater ol* 'the priest and his flock'. This extension was accompanied by a shift in word order; by placing the plural marker (or pronoun) before or after the noun, the same form could indicate plural or a group associated with a person. Again, it is not coincidental that this group plural matches several MNAN languages in using the third person plural pronoun. It is noteworthy that Tolai and Sa'a have a distinct plural morpheme, while Big Nambas and Lusi do not mark plurality in the noun phrase, and yet these languages all use the third person pronoun to indicate group plural. Mühlhäusler (1980a:43) is uncertain whether this pattern in Tok Pisin is borrowed from substrate languages, and he suggests that it is an internal development of Tok Pisin, inasmuch as comparable constructions are found in unrelated pidgins and creoles. This innovation is found in Bislama, however, and must have occurred relatively early, so that it is not a Tok Pisin innovation. Substratum influence provided the model upon which this structure developed, using the resources

available. Similar innovation may have occurred elsewhere without this substratum influence, but the solution was directed by the same resources and by the same semantic transparency principles underlying the development.

The ultimate choice can be seen as satisfying to most Melanesians, whether their native language has a distinct plural form or a third person plural form: Tok Pisin, Pijin and Bislama have a free morpheme that also coincides with the third person plural. Substratum was clearly involved in the choice, in spite of individual differences among the substrate languages. The choice was constricted by the results of the initial learning stages, but the clear meaning of plurality in the English etymon *all* made it a good choice for the role.

Pijin opted for *olgeta* ~ *olketa* instead of *ol* for the plural marker and the third person plural pronoun, as did Papuan Pidgin English (Mühlhäusler 1980a:63-64) and some dialects of Bislama. The semantic difference between English 'altogether' and 'all' could not have been clear in the early stages of the lingua franca, and even to native speakers they appear to be nearly synonymous. It may be equally possible that 'all' was perceived as a short form of 'altogether', especially given the observations that (1) Pijin and some dialects of Bislama use *olgeta* as a focal pronoun and *ol-i* as a predicate marker and (2) variation between *ol* and *olgeta* can be found in the early texts (cf. Keesing 1988a:129). The lexical distinction between plurality and 'all' was subsequently sorted out differently: Pijin uses *olketa* for the plural marker (and has lost *ol*) and *evriwan* for 'all', Tok Pisin has *ol* and *olgeta* respectively and lacks a cognate form of 'every', while Bislama has *ol* or *olgeta* for the plural marker, *olgeta* for 'all', and *evri* for 'every'.

As Mühlhäusler notes, 'during the stabilisation stage, a pidgin becomes a linguistic system with a well-defined set of potentialities for further expansion' (1980a:46). Having opted for either *ol* or *olgeta*, the Bislamic languages satisfied Melanesian notions of how plurality should be marked, namely, by a free morpheme with a clear plural meaning through its association with the third person plural pronoun, and this done they proceeded to expand its usage along the semantic and syntactic hierarchies described earlier.

The semantic hierarchy also followed Melanesian lines at the beginning in opting for [+human] over [+animate], and then [-animate]. Among MNAN languages plurality is most clearly marked with [+human]; thereafter there is great variation as to the acceptability of marking plurality with [+animate] and particularly with [-animate]. Once the Melanesians began to learn the lingua franca at a very early age, the need for substratum-derived calques and models was unnecessary, since the pidgin had stabilised and possessed the material upon which expansion could proceed. The plural marker spread through the semantic and syntactic hierarchies, and redundancy appeared. Thus substratum influence made itself felt in the need for plural marking and the form it took from the choice of alternatives available, but once the plural marker was established, its usage developed along its own lines.

The use of reduplication in Tok Pisin as a distributive also appears to be supported by MNAN models where reduplication is used for a host of different purposes, both inflectional and derivational. As Mühlhäusler states, 'the use of reduplication to express plurality is a straightforward case of iconic encoding' (1980a:71). The use of reduplication as a device for marking collectivity, distribution or plurality in a number of Melanesian languages may have reinforced the development of reduplication as an 'iconic encoding' in Tok Pisin. It appears, however, fairly late in the history of Tok Pisin (for example, it appears to be absent in the pre-stabilised form), and for this reason Mühlhäusler prefers to consider it an internally-motivated development (1980a:71). Since the

phenomenon is so widespread among MNAN languages, however, and since its semantic value is quite clear, it may also be possible that substratum influence was involved. If Melanesians calqued a distributive or collective by reduplication even in a stabilised lingua franca, it is quite likely that it would be accepted by other speakers of the lingua franca and spread accordingly. It may even have spread from more than one point of origin. Although Mühlhäusler criticises the 'static' comparisons of substratum explanations, limiting innovation arising after stabilisation to some language-internal motivation is not more dynamic than suggesting that certain later developments can also arise from calquing. In either case, speakers of the language have a semantic problem which they are trying to solve, a lexical repertoire from which to work, and a stabilised language structure which constrains the shape an innovation may take.

### 5.3 USE OF *bilong* TO MARK POSSESSION

In this section, the use of *bilong* to mark possession in Tok Pisin noun phrases is compared to the use of possessive morphemes in MNAN languages.

#### 5.3.1 POSSESSION IN TOK PISIN

Possessive relationships in Tok Pisin are indicated by N<sub>1</sub> *bilong* N<sub>2</sub>, where N<sub>1</sub> represents the possessum (head noun) and N<sub>2</sub> represents the possessor noun (or pronoun). Equivalent structures are found in Pijin and Bislama using *blong*, which is also, in fact, a common pronunciation of the longer Tok Pisin form *bilong*. As Keesing points out, 'possessive constructions *establish semantic relationships between nouns* [his emphasis]' (1985:23), such as ownership, kinship relations, parts of wholes (e.g. parts of the body), etc. Mihalic (1971:13) defines the relationships that are marked by *bilong* as possession, purpose, origin and characteristic trait. Laycock (1970:xxviii) states the use of *bilong* as one involving an intimate or permanent relationship between two objects, that is, possession, purpose or customary behaviour (Mihalic's 'characteristic trait'). Although not an exhaustive list, these relationships represent the focal semantic functions of the morpheme.

*gaden bilong papa bilong mi*  
garden poss father poss 1s  
my father's garden

*pinga bilong han bilong yu*  
finger poss hand poss 2s  
your fingers

#### 5.3.2 POSSESSION IN MNAN LANGUAGES

In the MNAN languages, possessive marking is complicated by a number of factors, the most important being the placement of nouns into possessive classes which are well defined formally but less easily defined by semantic criteria (see also Keesing 1988a:117ff). Although these classes vary in number from language to language, all MNAN languages distinguish at least between inalienable and alienable nouns.

With inalienable possession, the possessum is generally perceived to be inherently bound to the possessor. Such nouns include body parts or parts of a whole, positional relationships, physical

attributes and emotions, and kinship terms. MNAN languages agree relatively closely in the membership of nouns within this class, although minor differences occur from language to language.

Inalienable nouns differ from alienable nouns in their syntactic expression. In the case of inalienable nouns, a set of possessive pronominal suffixes,<sup>4</sup> representing the person of the head noun is affixed directly to the possessed noun (see Appendix IV):

LUSI	<i>lima-gu</i>
	hand-1s
TP	<i>han bilong mi</i>
	hand poss 1s
	my hand
LUSI	<i>tama-mu</i>
	father-2s
TP	<i>papa bilong yu</i>
	father poss 2s
	your father

Alienable possession implies the potential to change ownership, and a less intimate relation of the possessum to the possessor. Alienable possession makes use of possessive morphemes to which are affixed the same possessive pronouns that accompany inalienable nouns.

Not all MNAN languages have the same number of subcategories of alienable nouns. Some languages have only one generalised alienable class which contrasts with the inalienable class. In Nguna, Port Sandwich, Big Nambas and Kwaio, this alienable class is marked with a possessive morpheme, while in Nakanai it is marked with a preposition (the pronominal suffixes affixed to prepositions are different from the pronominal suffixes affixed to possessive morphemes). Sie has both a possessive morpheme, *horu-*, and a preposition, *eni-*, to indicate alienable possession. According to Ray (1926:362) 'the prepositions *isa* and *xini* are sometimes equivalent to a possessive' in Tangoan; *isa* is clearly related to the Port Sandwich possessive marker *isa*.

In Nguna, Schütz (1969a:38) describes a 'verb' *aji-* 'belong to' which acts very much like a preposition except that it takes a unique set of pronominal affixes. It is treated here simply as a possessive morpheme. Tigak has three possessive morphemes: *ka-*, which precedes the noun, and *tata-* and *tesu-*, which follow the noun. There appears to be no difference in meaning among these variants.

Most MNAN languages, however, reflect a number of alienable possessive subcategories. The most widespread categories are the so-called 'dominant' or 'neutral' class, and the 'subordinate' or 'edible' class, marked by the use of two different possessive morphemes. Pawley (1973:153ff) reconstructs these two alienable classes for POC: *\*na* 'dominant' and *\*ka* 'subordinate'. According to Ivens (1918), Sa'a uses simple juxtaposition to indicate possession; nonetheless, his dictionary includes both a neutral possessive *a-* and an edible possessive *?a-*, although insufficient information is given to adequately define their range of usage.

LUSI	<i>a-gu haniŋa</i>
	poss-1s food
TP	<i>kaikai bilong mi</i>
	food poss 1s
	my food

LUSI	<i>le-gu luma</i>
	poss-1s house
TP	<i>haus bilong mi</i>
	house poss 1s
	my house

Further examples of these two classes in Lusi are provided in Appendix IV.

In Lusi and related languages of West New Britain there are possessive prepositions which neutralise the distinction between 'edible' and 'neutral' alienable possession.

LUSI	<i>luma to-gau</i>
	house prep-1s
TP	<i>haus bilong mi</i>
	house poss 1s
	my house

KILE	<i>na-nia ki-au</i>
	nm-house prep-1s
TP	<i>haus bilong mi</i>
	house poss 1s
	my house

In the languages of Vanuatu, and to a lesser extent elsewhere, further distinctions among alienable nouns can be found, such as the 'potable' class. A detailed discussion of possession in Vanuatu languages is provided by Tryon (1973:313ff).

Further differences among MNAN languages arise when the possessive relationship involves two nouns, e.g. N of N. Most MNAN languages maintain the inalienable-alienable distinction, many using the requisite possessive construction, usually with the third person pronominal affixes intact, as in Lusi:

LUSI	<i>puza meza-zi</i>
	whiteman way-3p
TP	<i>pasin bilong ol waitskin</i>
	way poss pl whiteman
	the whitemen's ways

LUSI	<i>tna-za le-zi luma</i>
	mother-1n poss-3p house
TP	<i>haus bilong mama bilong yumi</i>
	house poss mother poss 1n
	our mothers' houses

LUSI	<i>gaea a-zi haniŋa</i>
	pig poss-3p food
TP	<i>kaikai bilong ol pik</i>
	food poss 3p pig
	the pigs' food

Lenakel and Big Nambas, however, have Ø affixation for the third person singular in this syntactic frame, while constructions with or without the third person singular suffix occur in Mota:

LENA	<i>nelki</i> <i>pukas</i> leg        pig	(Lynch 1978:78)
TP	<i>lek bilong pik</i> leg poss    pig the pig's leg	
LENA	<i>nite nik uusuaas</i> taro poss boy	(Lynch 1978:80)
TP	<i>taro bilong manki</i> taro poss    boy the boy's taro (to eat)	
NAMB	<i>vli lapu</i> tail rat	(Fox 1979:25)
TP	<i>tel bilong rat</i> tail poss    rat a rat's tail	
MOTA	<i>pwat pwoe</i> head pig	(Codrington 1896:xiv)
TP	<i>het bilong pik</i> head poss    pig a pig's head	
MOTA	<i>susu-n raveve-na</i> breast-3s mother-3s	(Codrington 1896:xvii)
TP	<i>susu bilong mama bilong-en</i> breast poss    mother poss-3s his mother's breast	

Some languages possess a distinct set of connective morphemes (c) for use in binominal constructions. These connective morphemes are different in form from the possessive morphemes. In many languages the connective morpheme is suffixed to inalienable nouns (N-c N) or to the possessive morphemes of alienable nouns (N poss-c N). Pawley (1972) reconstructs three such connective morphemes for PEO.

Nguna has two connective morphemes that reflect 'dominant' (*ki*) and 'subordinate' (*ni*) possession; *ni* is also one of several Kwaio connectives having distinct semantic functions (see Keesing 1985:105ff). In Tigak, *i* is used with names and kinship terms, while *ina* is used with common nouns. Tolai also uses *i*, suffixed to the possessive morphemes.

TOLA	<i>a tama i ra bul</i> nm father c nm child	(Mosel 1980:114)
TP	<i>papa bilong pikinini</i> father poss    child the child's father	



TOLA	<i>a pal ka-i ra tutana</i>	
	nm house poss-c nm man	(Mosel 1980:114)
TP	<i>haus bilong man</i>	
	house poss man	
	the man's house	
TOLA	<i>a nian a-i ra tutana</i>	
	nm food poss-c nm man	(Mosel 1980:115)
TP	<i>kaikai bilong man</i>	
	food poss man	
	the man's food	

Table 5 shows the possessive morphemes found in the languages of this study. Inalienable possession is shown by the first person singular possessive suffix, 'my'. The potable class is one that is widespread among the languages of southern Melanesia. Other less common possessive classes have not been included in this table.

TABLE 5: POSSESSIVE MORPHEMES IN MNAN LANGUAGES

	INALIENABLE	ALIENABLE	NEUTRAL	EDIBLE	POTABLE
LENA	-k	-	<i>taha-</i>	<i>niko-</i>	<i>nimw-</i>
TANN	-k	-	<i>kafa-</i>	<i>na-</i>	<i>ni-</i>
SIE	-ŋ	<i>horu-, eni-</i>	-	-	-
NGUN	-ŋu	<i>aji-</i>	-	-	-
PAAM	-ku	-	<i>ona-</i>	<i>aa-</i>	<i>mo-</i>
AMBR	-k	-	<i>ha-</i>	<i>a-</i>	<i>ma-</i>
PORT	-ŋg	<i>isa-</i>	-	-	-
NAMB	-ŋk	<i>na-</i>	-	-	-
TANG	-ku	<i>isa-, xin-</i>	<i>no-</i>	<i>ga-</i>	<i>na-</i>
RAGA	-ku	-	<i>no-</i>	<i>ga-</i>	<i>ma-</i>
MOTA	-k	-	<i>no-</i>	<i>ga-</i>	<i>mwa-</i>
AROS	-gu	-	<i>a-</i>	<i>?a-</i>	-
KWAI	-gu	<i>a-</i>	-	-	-
SA'A	-ku	N + Pronoun	<i>a-</i>	<i>?a-</i>	-
LONG	-ŋgu	-	<i>na-</i>	<i>a-</i>	-
VATU	-ŋgu	-	<i>ni-</i>	<i>ha-</i>	-
BUGO	-ŋgu	-	<i>ni-</i>	<i>ga-</i>	-
TIGA	-k	<i>ka-, tesu-, tata-</i>	-	-	-
TOLA	-gu	-	<i>ka-</i>	<i>a-</i>	-
NAKA	-gu	<i>te-</i>	-	-	-
LUSI	-gu	<i>to-</i>	<i>le-</i>	<i>a-</i>	-
MANA	-gu	-	<i>ne-</i>	<i>?ana-</i>	-
BALA	-yu	-	<i>ye-</i>	<i>ya-</i>	-

Table 6 presents the constructions used by MNAN languages in binominal (N of N) possession (compare Table 5). Certain gaps exist in the data, especially as concerns binominal possession in the languages of the Solomon Islands. In the table, N- represents an inalienable noun which takes the third person suffixes; c represents a connective morpheme.

TABLE 6: BINOMINAL POSSESSION IN MNAN LANGUAGES

	INALIENABLE	ALIENABLE	NEUTRAL	EDIBLE
LENA	N-Ø N	-	N <i>taha</i> -Ø N	N <i>nik</i> -Ø N
TANN	N-c N	-	N <i>kafa</i> -c N	N <i>na</i> -c N
SIE	N- N	N <i>en</i> N	-	-
NGUN	N N-	N <i>ki/ni</i> N	-	-
PAAM	N-c N	-	N <i>one</i> -c N	N <i>aa</i> -c N
AMBR	N-c N	-	N <i>ha</i> -c N	N <i>a</i> -c N
PORT	N- c N	N <i>sa</i> N	-	-
NAMB	N-Ø N	N <i>na</i> - N	-	-
TANG	N-c N	-	N <i>no</i> - N	-
MOTA	N-c/-n/-Ø N	-	N <i>no</i> - N	-
AROS	N- c N	-	N <i>a</i> - N	N ? <i>a</i> - N
SA'A	N- N, N c N	-	-	-
KWAI	N-c N	N c N	-	-
LONG	N- N	-	N <i>na</i> - N	N <i>a</i> - N
VATU	N- N	-	N <i>ni</i> - N	N <i>ha</i> - N
NGGE	N- N	-	N <i>ni</i> N	-
BUGO	N- N	-	N <i>ni</i> - N	N <i>ga</i> - N
TIGA	N-c	N <i>tata</i> -c N	-	-
TOLA	N c	-	N <i>ka</i> -c N	N <i>a</i> -c N
NAKA	N- N	N <i>te</i> N	-	-
LUSI	N N-	N <i>to</i> - N	N <i>le</i> - N	N <i>a</i> - N
MANA	N N-	-	N N <i>ne</i> -	N N ? <i>ana</i> -
BALA	N N-	-	N <i>ye</i> - N	N <i>ya</i> - N

## 5.3.3 DISCUSSION

The possessive morpheme *bilang* is very similar in structure and usage to the alienable possessive morphemes of MNAN languages. In both groups of languages, the possessor is joined to the head noun by means of a relator morpheme, where 'relator' (r) collapses the distinction between possessive morphemes and connective morphemes: N r N/Pro. If *bilang* is used to calque a MNAN relator morpheme, the resultant Bislamic form is usually correct.

PAAM     *vakilii ona-ku*  
            canoe r-ls

(Crowley 1982:214)

TP        *kanu bilang mi*  
            canoe r        ls  
            my canoe

TANN     *nisin-i pilavin*  
            mother-r woman

(Lynch 1982:44)

TP        *mama bilang meri*  
            mother r        woman  
            the woman's mother



make the MPE construction more acceptable to new learners whose native language is otherwise structured slightly differently. Furthermore, those Melanesians who are at least bilingual must encounter many such minor word-order differences among the vernacular languages they speak.

The Tok Pisin possessive construction is simpler than corresponding MNAN possessive constructions in that (1) it has a single, fixed word order (house r N/Pro) where MNAN languages like Ambrym, Tolai and Lusi have two different word orders (house r N and r-Pro house); (2) the Tok Pisin construction uses only a single invariant morpheme in both (N r N) and (N r Pro) frames, where some MNAN languages have two different morphemes: a possessive morpheme used with pronouns (N poss-Pro) and a specific connective morpheme for binominal constructions (N c N ); and (3) Tok Pisin has a single possessive construction where MNAN languages differentiate at least between alienable and inalienable. The use of *bilong* neutralises the semantic distinctions of the MNAN languages which themselves show variation in the number of semantic distinctions made. Tok Pisin has also avoided the complications involved in attributing nouns to possessive classes, when the substrate languages themselves do not agree consistently in this regard. Such simplifications suggest that learning the Tok Pisin construction should not be difficult for MNAN language speakers, even when their vernacular languages differ in word order.

It is noteworthy also that *bilong* has a prepositional counterpart in such languages as Sie, Tangoan, Nakanai and Lusi. Such prepositions are invariable in form (in Lusi the preposition *to*-neutralises the two alienable noun classes) and they eliminate the need for the two distinct sets of pronouns found in most MNAN languages: one for possessive constructions and another for objects of verbs or prepositions, e.g. Lusi *-mu* 'your' and *-go* 'you'. Although the prepositional construction is used as an emphatic or contrastive possessive in Lusi and its relatives, Kove, Kabana and Kilenge, it is also used in simplified registers such as foreigner-talk because it is easier to learn and to use than the three types of possessive constructions, their semantic values and a distinct set of possessive suffixes. Similarly, the use of a prepositional phrase for possessive constructions in Tok Pisin is easily learned and used, since it does not require a set of suffixes different from object pronouns, it lacks subclasses and has a single word order. It still maintains a similarity in structure and meaning to MNAN languages, albeit in a simpler form. Keesing also notes this simplification:

I infer that this kind of neutralization of surface distinctions and markings [between alienable and inalienable classes] would be a fundamental process in the formation of pidgins even in the limiting case where those who contribute to its formation all speak related languages. This process is well illustrated by Siegel's [1987] data on Pidgin Fijian. (1988a:118)

A similar solution to the problem of possession is found in Hiri Motu, a pidginised form of Motu. In Motu, as in many MNAN languages, there are three possessive classes: inalienable, edible and neutral:

MOTU	<i>tama-gu</i>	
	father-1s	
	my father	(Wurm 1964:31)
	<i>a-gu aniani</i>	
	poss-1s food	
	my food	(Wurm 1964:31)

*e-gu ruma*  
 poss-1s house  
 my house

(Wurm 1964:31)

The possessive suffixes in Motu happen to be the same as the object suffixes, with the exception of the third person singular, which has *-na* as the possessive pronoun and *-ia* or *-a* as the object pronoun. Thus the object/possessive distinction is already neutralised in the target language, with a minor complication in the third person singular.

In Hiri Motu, the neutral class has been generalised to all nouns, although the inalienable nouns of Motu have a fossilised 'empty' third person singular suffix *-na*:

HMOT *lau e-gu tamana*  
 1s poss-1s father  
 my father

(Wurm 1964:31)

*lau e-gu aniani*  
 1s poss-1s food  
 my food

(Wurm 1964:31)

*lau e-gu ruma*  
 1s poss-1s house  
 my house

(Wurm 1964:31)

Like Tok Pisin, then, Hiri Motu has adopted a single, invariant possessive morpheme, associated with an invariant set of pronouns to express possession.

#### 5.4 USE OF *bilong* TO MARK OTHER SEMANTIC RELATIONSHIPS

In addition to being a possessive morpheme, the Tok Pisin lexeme *bilong* is used to mark purpose, origin and habitual agent. Unfortunately, the literature on MNAN languages lacks detail in this area, so that such semantic relationships remain poorly described, and the following discussion is accordingly limited. Where possible, appropriate examples will be given at least to suggest how Tok Pisin and MNAN languages relate in this area.

##### 5.4.1 PURPOSE

Purpose phrases almost invariably take *bilong*, and they indicate that the first noun in the phrase is used for the activity suggested by the second noun:

*kaikai bilong singsing*  
 food poss dance  
 food for the dance

*papait bilong ren*  
 spell poss rain  
 magic spell for rain

*wara bilong dring*  
 water poss drink  
 drinking water



other MNAN languages, similarities can be found between these relator morphemes and the connective or the possessive morphemes, suggesting that they are historically related lexical items:

LUSI	<i>ki atama aea</i>
	key door r
TP	<i>ki bilong dua</i>
	key poss door
	key for the door

Only two of the sample languages, Tangoan and Bugotu, use simple juxtaposition of nouns to mark this same semantic relationship:

TANG	<i>peri ima</i>	
	post house	
		(Camden 1979:84)
TP	<i>pos bilong haus</i>	
	post poss house	
	house post	

Mihalic (1971:9) notes that juxtaposition is also used in Tok Pisin to express purpose in such phrases as *haus sik* 'hospital' < 'house sick'. Juxtaposition is used in other constructions involving the lexemes *haus* 'building', *rum* 'room', *ples* 'place' etc. to describe the location in which a certain activity regularly occurs or where someone or something lives or is stored:

*haus kuk*  
house cook  
cook-house, kitchen

*haus kaikai*  
house eat  
restaurant

*haus lotu*  
house worship  
church

*haus kakaruk*  
house chicken  
chicken coop

*rum slip*  
room sleep  
bedroom

*ples masalai*  
place bush spirit  
area inhabited by a bush spirit

In Bislama, however, two constructions are found, one using juxtaposition, and the other using the connective *blong*:

BISL	<i>haos mersin</i>	
	house medicine	
	dispensary	(Guy 1974:21)

*haos blong faol*  
house poss chicken  
chicken coop

(Camden 1979:85)

*haos prea* or *haos blong prea*  
house pray house poss pray  
church

(Camden 1977:35)

In New Britain at least, expansion of the *haus X* phrases to *haus bilong X* results in a slight change of meaning. In the *haus X* type construction, the focus is on location (the house where *X* occurs); in the *haus bilong X* type construction, the focus is on the purpose of the building (the house built for *X*):

*haus kopra* = *haus yumi save wok-im kopra long-en*  
house copra house 1n hab make-tr copra loc-3s  
the building where we prepare copra

*haus bilong kopra*  
house poss copra  
copra shed

The semantic difference between purpose and location is vague, since the place where an activity is habitually performed is usually the place set aside for that purpose. Consequently, the distinction is not consistently made, and the choice between possible constructions is subject to variation. Thus *haus bilong X* is seldom used in West New Britain as a purpose phrase, but *rum slip* 'bedroom' (Mihalic 1971:221) is always expanded in West New Britain to *rum bilong slip*, a purpose phrase. This variation occurs in Bislama (see above), and Laycock (1970:xxviii) and Wurm (1971:61) also note variation in the presence or absence of *bilong* in mainland Tok Pisin.

In MNAN languages, no distinction between location phrases of this sort and purposes phrases is found (see Appendix V). Those which use a connective morpheme for purpose phrases use this same morpheme in comparable location phrases:

LUSI *luma tahe aea*  
house faeces c  
TP *haus pekpek*  
house faeces  
outhouse

Examples are found in a few languages (Lenakel, Port Sandwich, Tangoan, Vaturanga), however, in which juxtaposition is preferred:

TANG *ima toa*  
house chicken  
TP *haus kakaruk*  
house chicken  
chicken coop

(Camden 1979:84)



#### 5.4.2 ORIGIN

Tok Pisin may also use *bilong* to indicate place of origin:

*man bilong bus*  
man poss bush  
a bush dweller

*meri bilong ostrelia*  
woman poss Australia  
an Australian woman

As with location phrases, however, there is regional variation in the use of *bilong*, and some speakers use a juxtaposed form, e.g. *meri ostrelia* 'an Australian woman'. In the case of nationalities, the head noun may be omitted: *wanpela saina* 'a Chinese person'.

Most MNAN languages use a possessive or connective morpheme in this function, while others use a preposition or, as in Lusi, a postposition.

LUSI	<i>tanta loŋa aea</i>
	man interior c
TP	<i>man bilong bus</i>
	man poss bush
	a bush dweller

Lenakel uses a specialised locative possessive morpheme:

LENA	<i>ieram iimwa Ioualmine</i>	
	the:one poss:loc Ioualmine	(Lynch 1978:39)
TP	<i>ol man bilong Ioualmine</i>	
	pl man poss Ioualmine	
	Ioualmine men	

Like some Tok Pisin dialects, Bislama uses juxtaposition, e.g. *man bus* 'pagan'; 'unsophisticated islander' (Tryon 1988a:240), as do Tangoan, Tigak and Tolai:

TOLA	<i>a bul Niugini</i>	
	nm child New Guinea	(Mosel 1980:23)
TP	<i>pikinini bilong Niugini</i>	
	child poss New Guinea	
	a New Guinean child	

### 5.4.3 HABITUAL AGENT

This construction characterises an animate being as one who habitually engages in a certain activity:

*meri bilong hatwok*  
woman poss hardwork  
a hardworking woman

*dok bilong pait*  
 dog poss fight  
 a pugnacious dog

*man bilong raun*  
 man poss wander  
 a wanderer

*man bilong giaman*  
 man poss deceit  
 a liar

Bislama has a comparable construction, e.g. *man blong giaman* 'a liar', *man blong faet* 'a brawler' (Tryon 1988a:46). Laycock (1970:xxviii) notes that *bilong* can often be omitted in such constructions. Although this is not the case in New Britain where *bilong* is obligatory, there is regional variation in the use of *bilong* elsewhere in Papua New Guinea.

In the verbal paraphrases corresponding to the above noun phrases, the habitual nature of the activity is shown by the use of the habitual aspect marker *save*:

*meri i save hatwok tumas*  
 woman sr hab hardwork very  
 the woman works a lot

*dok i save pait tumas*  
 dog sr hab fight very  
 the dog fights a lot

*man i save raun oltaim oltaim*  
 man sr hab wander always always  
 the man wanders around all the time

The verbal component may be expanded to incorporate an object. Thus *man bilong kaikai* 'a glutton' may be expanded to:

*man bilong kaikai pik*  
 man poss eat pig  
 a glutton for pork

Compare BISL *man blong dring kava* 'a heavy kava drinker' (Tryon 1988a:46).

Many MNAN languages have language-specific morphology for deriving an agent noun from a verb, but the literature is too inadequate on the topic of habitual agency to permit a thorough comparison. The few examples that are available show that this semantic relationship can be marked in some MNAN languages by a construction similar to the Tok Pisin construction, using a connective or possessive morpheme, as found in Lusi:

LUSI	<i>tanta pam=pahano aea</i>
	man rd=steal r
TP	<i>man bilong stil</i>
	man poss steal
	thief

In Paamese, a special prefix exists for marking habitual agent, while Tangoan uses juxtaposition.

PAAM	<i>uti-muni meleke-ene</i> hab:agent-drink milk-nom	(Crowley 1982:102)
TP	<i>man bilong dring susu</i> man poss drink milk a habitual milk drinker	
TANG	<i>tamloxi xalu</i> man lie	(Camden 1979:86)
TP	<i>man bilong giaman</i> man poss lie a liar	
TANG	<i>tamloxi xani poi</i> man eat pig	(Camden 1979:86)
TP	<i>man bilong kaikai pik</i> man poss eat pig a man who likes to eat pork	

#### 5.4.4 DISCUSSION

Table 7 shows the ways in which purpose, origin and habitual agent are marked in the languages under discussion.

TABLE 7: PURPOSE, ORIGIN AND HABITUAL AGENT MARKING

	PURPOSE	ORIGIN	HABITUAL AGENT
TP	<i>bilong</i>	<i>bilong</i>	<i>bilong</i>
LENN	-	poss	-
NGUN	c	c	-
PAAM	c	c	*
AMBR	c	c	-
PORT	c	-	-
NAMB	poss	-	poss
TANG	Ø	Ø, c	Ø
RAGA	-	c	-
MOTA	-	c	-
SA'A	c	c	-
KWAI	-	c	-
VATU	-	c	-
NGGE	c	c	c
BUGO	Ø	c	Ø
TIGA	c	Ø	-
TOLA	c	Ø	-
NAKA	poss	-	poss
LUSI	c	c	c
MANA	poss	-	-
BALA	poss	Ø	-

In this table, *c* represents either the connective morphemes found in binominal possessive constructions, or specialised relator morphemes; 'poss' represents the use of possessive morphemes; and an asterisk indicates the presence of a language-specific derivational device. Where no data are available for comparison, a hyphen is used. It should be noted that because of the dearth of information on these topics certain of the markers listed in the table are based on a single example gleaned from the literature, and may not represent the most productive marking system of that language. Hence their use here is suggestive, not conclusive, of how such marking is done in MNAN languages.

As is the case with possession, Tok Pisin is similar to the majority of MNAN languages available for comparison here, since both groups mark purpose, origin and habitual agent phrases with connective morphemes. Tok Pisin is simpler in form than those MNAN languages which have specialised connective morphemes for marking these semantic relationships, since Tok Pisin has a sole connective morpheme, *bilong*. On the other hand, not every MNAN language has a distinct set of connective morphemes as against possessive morphemes, so that Tok Pisin resembles these languages not only in structure, but also in the choice of morphemes for a particular task.

Location phrases of the form *haus X* represent a derivational pattern in Tok Pisin used to express introduced concepts. Terms like 'hospital', 'chicken coop', 'church', 'bedroom', 'restaurant' and 'outhouse' are for the most part absent in MNAN languages, and the majority of the MNAN examples provided in Appendix V also represent introduced concepts. When the need for a derivational pattern to express such locative relationships was introduced by Europeans who settled in Melanesia, these were translated into the vernacular languages as purpose phrases. The distinction between purpose and location is unique to Tok Pisin, and it is still being sorted out by Melanesians whose vernacular languages mark purpose but not location phrases. The variation in the use of *haus* and *rum*, with or without *bilong*, reflects the difficulty Melanesians have with this Tok Pisin distinction. The *bilong* constructions are modelled on vernacular languages, whereas the juxtaposed phrases must be learned as distinctive Tok Pisin constructions.

I have also noted variation in the use of *bilong* to mark place of origin and habitual agent in Tok Pisin. Although the reasons for this cannot be confirmed here, it is possible that variation in the expression of such concepts in mainland languages may account for certain aspects of this variation. In such cases, juxtaposition may reflect comparable substrate structures, or it may be used as a marked form to distinguish these concepts from the possessive and purpose content that are the focal (hence unmarked) functions of *bilong*. In this regard, it is noteworthy that little variation occurs in the case of possessive and purpose phrases. These explanations are probably applicable to the differences between Tok Pisin and Bislama in the use of *bilong/blong* and juxtaposition.

## 5.5 USE OF JUXTAPOSITION TO MARK SEMANTIC RELATIONSHIPS

In addition to the use of *bilong*, Tok Pisin also employs juxtaposition to expand noun phrases. As discussed above, juxtaposition may be used in certain regional varieties of Tok Pisin and Bislama to mark semantic functions such as location, origin and habitual agent. The use of juxtaposition to mark gender and material of construction, on the other hand, evinces no such variation.

## 5.5.1 GENDER

The gender of animate beings is indicated in Tok Pisin by the use of either *man* 'man' or *meri* 'woman' after the head noun. This applies also to the Bislama use of *man* 'man' and *woman* 'woman'. These phrases denote an equative relationship between the nouns:

	<i>sikau meri</i>
	wallaby woman
	a female wallaby
=	<i>sikau i meri</i>
	wallaby sr woman
	the wallaby is female
	<i>pikinini man</i>
	child man
	a male child; a boy; a son
=	<i>pikinini i man</i>
	child sr man
	the child is male

Juxtaposition is also widespread among MNAN languages for marking gender (see Appendix VIII):

LUSI	<i>gaea tamine</i>
	pig woman
TP	<i>pik meri</i>
	pig woman
	sow

In some languages there are specific lexemes for male and female beings, and in some there are adjectival forms equivalent to 'male' and 'female'. Nonetheless, where a noun 'man' or 'woman' is used, it occurs in juxtaposition, and not with a connective morpheme.

## 5.5.2 MATERIAL OF CONSTRUCTION

The material from which something is constructed is also shown by juxtaposition.

	<i>haus kunai</i>
	house grass
	a grass house
=	<i>haus ol i wok-im long kunai</i>
	house 3p sr make-tr inst grass
	the house is made of grass
	<i>nil ain</i>
	needle iron
	iron needle
=	<i>nil ol i wok-im long ain</i>
	needle 3p sr make-tr inst iron
	the needle is made of iron

Bislama also uses juxtaposition to mark this semantic relationship, e.g. *haos kava* 'a house with a galvanised iron roof', as do many MNAN languages (see Appendix IX):

LUSI	<i>luma patu</i>
	house stone
TP	<i>haus ston</i>
	house stone
	stone house

In a few MNAN languages, however, one finds connective morphemes:

TOLA	<i>pal na kapa</i>	
	house c metal	(Mosel 1980:87)
TP	<i>haus kapa</i>	
	house metal	
	house made of corrugated iron	

### 5.5.3 DISCUSSION

Table 8 presents the constructions found in the sample for marking gender and material of construction;  $\emptyset$  represents juxtaposition.

TABLE 8: MARKING GENDER AND MATERIAL OF CONSTRUCTION IN MNAN

	GENDER	MATERIAL OF CONSTRUCTION
PAAM	-	c
AMBR	$\emptyset$	-
PORT	-	$\emptyset$
TANG	$\emptyset$	$\emptyset$
RAGA	$\emptyset$	$\emptyset$
MOTA	$\emptyset$	$\emptyset$
SA'A	$\emptyset$	c
KWAI	$\emptyset$	-
LONG	$\emptyset$	-
VATU	$\emptyset$	$\emptyset$
NGGE	$\emptyset$	$\emptyset$
BUGO	$\emptyset$	$\emptyset$
TIGA	$\emptyset$	-
TOLA	$\emptyset$	c
NAKA	-	poss
LUSI	$\emptyset$	$\emptyset$
MANA	$\emptyset$	-
BALA	$\emptyset$	-

MNAN languages are in close agreement with Tok Pisin in the use of juxtaposition for marking gender. As regards material of construction, the majority of MNAN languages also agree with Tok Pisin, although there are four languages in the sample which prefer a relator morpheme to juxtaposition.

The use of juxtaposition to mark gender in Tok Pisin is an obvious solution, requiring simply the deletion of the subject referencing pronoun *i* in the comparable equative constructions. The correspondence with MNAN languages may thus be fortuitous, but it must certainly have played a role in establishing this pattern as a productive one in preference to the development of specific gender nouns (*rooster, hen* etc.) or the acquisition of gender adjectives (*female, male*). The use of juxtaposition to mark material of construction is a less obvious solution. Although English also uses juxtaposition, as in *stone house*, the order of the elements in Tok Pisin follows the MNAN pattern and not the English one. The deletion of the verb phrase counterpart of these phrases produces a noun phrase which matches the MNAN languages; clearly this influenced the development of such constructions in Tok Pisin.

## 5.6 SUMMARY

The following relationships between structure and semantic content have been identified for Tok Pisin:

possession	<i>+bilong</i>
purpose	<i>+bilong</i>
origin	<i>±bilong</i>
habitual agent	<i>±bilong</i>
gender	<i>-bilong</i>
material	<i>-bilong</i>

The use of *bilong* and the use of juxtaposed noun phrases has resulted in the ability to distinguish between certain semantic relationships in Tok Pisin. The following couplets are provided to demonstrate the contrasts in meaning:

<i>dok man</i>	a male dog	(gender)
<i>dok bilong man</i>	the man's dog	(possession)
<i>naip mambu</i>	a bamboo knife	(material)
<i>naip bilong mambu</i>	a knife for cutting bamboo	(purpose)

The *bilong* construction was already present in the early stages of MPE (Mosel 1980:114). Clark (1979:44) documents its appearance as early as the Sandalwood English stage of the mid-1800s and shows that it is an extremely widespread lexeme in the various Pacific *lingue franche*. Although it has been attributed to Chinese Pidgin English, its function there is quite different from its function in Tok Pisin (cf. Baker 1987). Its presence in some form of foreigner-talk English used by mariners in the Pacific may be the result of the presence of such a form in CPE, but its usage in the Pacific is independent of the CPE usage.

The adoption of the English verb 'belong (to)' in MPE is noteworthy in two regards: (1) it involved a change of word class (from verb in English to preposition in MPE); and (2) it was favoured over simple juxtaposition, the adoption of English prepositions like 'of' or 'for', and the adoption of English possessives like 'my' and 'your'. Why *belong* was adopted for the possessive function, and not 'of', is an intriguing question. The Tok Pisin word *manua* 'man o' war, battleship' suggests that 'of' was available at some level, but was not incorporated into Pacific pidgin. There may be several reasons for this, including: (1) 'belong', as a phonologically more complex form than 'of' was perceptually more salient and hence more likely to be learned; (2) 'belong' may have been part of a foreigner-talk register on ships during this period – certainly, for

English speakers, the semantics of 'belong' must seem transparent, and as such it was likely to be used in paraphrases; (3) 'belong' may have been reinforced by its presence (with a different function, however) in CPE at the time; (4) the frequent reduction of 'of' to [ə] may have decreased its perceptual saliency, as in 'a friend o' mine'; (5) homophony of the reduced form [ə] with other English connectives may have decreased its availability, (e.g. 'gonna' from 'going to'); and (6) there are a number of complications arising in the use of 'of' relative to the genitive suffix {Z}, especially as regards animacy (e.g. 'the top of the ship' but rarely 'the ship's top', and 'the man's ship' but rarely 'the ship of the man') that would create problems in the acquisition of 'of'.

As regards the English possessive pronouns, Charpentier (1979b:340) suggests that phrases such as 'your knife' require a distinct genitive pronominal paradigm ('my', 'your', etc.) in the frame Pro N, and that this construction was too different from vernacular expressions of possession to be easily understood. When 'your knife' was unsuccessful in communication, he suggests that the English-speaking interlocutor produced synonymous paraphrases such as 'knife of yours' or 'knife belong to you'. The structure N belong Pro/N was acceptable to the southern Melanesians who could relate it to their own possessive constructions: N Poss Pro/N or N Prep Pro/N.

Since all MNAN languages mark alienable possessive relationships with a possessive morpheme, *bilong* was preferable to simple juxtaposition in marking the same relationship in MPE. Nonetheless, in most MNAN languages juxtaposition also plays a role in marking semantic relationships within noun phrases. As the pidgin grew, a need arose for finer semantic distinctions, and MPE adopted juxtaposition for specific purposes.

Although Tok Pisin agrees closely with MNAN languages in the use of connective morphemes to mark possession, less agreement is found when other semantic relationships are involved. The data available on the use of connective morphemes and juxtaposition in MNAN languages to mark semantic relationships other than possession are inadequate to a conclusive demonstration vis à vis the use of *bilong* and juxtaposition in Tok Pisin or Bislama. Nonetheless, one can see a tendency in Tok Pisin towards matching the semantic content of MNAN languages with the use of connective morphemes or of juxtaposed nouns, even if there are a few MNAN languages which diverge from the pattern preferred by their sister languages. In spite of the variation presented by the substrate languages, Tok Pisin has managed to agree with the majority of the MNAN languages in the type of construction it uses. A notable exception is found in the case of a locative distinction which appears to be unique to Tok Pisin, but in this case we find that neither Tok Pisin nor Bislama is fully normalised in the expression of this relationship with or without *bilong*.

On the plantations, then, when MPE was developing its communicative capabilities, speakers of MNAN languages found themselves with a single morpheme *bilong* and a need to express a number of semantic relationships found in their own languages. Both *bilong* and juxtaposition were used in attempts to calque from the vernacular languages, or simply to provide the most transparent means of making semantic connections between nouns. The successful constructions were ultimately those which resembled the majority of the MNAN languages, although regional variation continues to this day, reflecting an incomplete normalisation of certain semantic relationships.

While MNAN language speakers are usually required to learn certain Tok Pisin structures which differ somewhat from the syntactic expression of the same semantic content in their own languages, a high correspondence rate nonetheless exists between MNAN languages and Tok Pisin.



## CHAPTER 6

### THE VERB PHRASE

#### 6.1 INTRODUCTION

Chapter 6 discusses the marking of modality (tense, aspect and mood) within the verb phrase in Tok Pisin and MNAN languages. Tense refers to the placement of an event in time, either relative to the speech act or relative to other events. Comrie calls the reference point that is used to locate events in time the 'deictic centre', which is:

typically the present moment, and tenses locate situations either at the same time as the present moment [present tense]...or prior to the present moment [past tense], or subsequent to the present moment [future tense] with further potential categories if degrees of remoteness from the present moment are distinguished grammatically. (1985:14)

Not all tense systems are tripartite, in that it is possible for a language to distinguish between past and non-past, where non-past represents both future and present tenses. On the other hand, some systems seem to be based on a future/non-future distinction, that is, they mark past and present tense in one way and future tense in another. Such a distinction, however, usually indicates the presence of irrealis/realis mood marking, not tense *per se*.

Aspect refers to 'the internal temporal contour of a situation' (Comrie 1985:6): its progression and duration through time, completion, inception, etc. Mood refers to the speaker's attitude towards the action, whether it is deemed real, possible, necessary, permissible, etc.

The distinctions between tense, aspect and mood are often difficult to make, as they interact in subtle ways. Most present tenses, for instance, refer to actions 'which occupy a much longer period of time than the present moment' (Comrie 1985:37). An action in progress at the time of the speech act, for example, involves progressive aspect as well as present tense. The semantics involved in modality are poorly understood by many linguists even today, but the further one goes back in time, the more the authors confuse tense, aspect and mood. As a result, the descriptions available on MNAN languages vary considerably in quality and detail in this area. Because an analysis of modality in MNAN languages is constrained by the literature, that provided here is necessarily incomplete. In the discussion that follows, the topics described are limited to those which are not only widely covered in the literature, but also to those which (1) distinguish Tok Pisin from English; and (2) are shared by both Bislama and Tok Pisin, indicating their presence relatively early in the appearance of MPE.

## 6.2 TENSE

Tense is not grammaticalised in Tok Pisin. Events are placed in time according to the context in which they occur, or are made explicit by the use of lexical time referents. In the example that follows, the time frame of the event is indicated by the adverb 'yesterday', but the verb itself is unmarked for past tense:

*asde mi luk-im yu*  
 yesterday 1s look-tr 2s  
 yesterday I saw you

In both Tok Pisin and Bislama, however, there is evidence of a weakly established past tense marker *bin*. In the case of Bislama, this form:

indicates a narrative past tense. It indicates that the action of the verb is outside the sequence of the action of surrounding verbs..In Bislama generally *bin* is not widely used outside a narrative context. Indeed, apart from the Efate and Shepherds area in the centre of the archipelago it is rarely heard at all. However, there is an increasing tendency in central Vanuatu, and particularly on Radio Vanuatu, to use *bin* not only in a narrative context, but also as a general past tense indicator. This is perhaps due to the presence of a relatively large educated elite in and around Port Vila, the capital, and a correspondingly greater English language influence. (Tryon 1988a:121)

A comparable situation exists regarding the use of *bin* in Tok Pisin:

...*bin* is not used in Pidgin as frequently as one might expect on the basis of one's knowledge of English where tense is always indicated in the form of the verb. This is because *bin* seems to be a recent development in some areas and because...verbs in Pidgin rely more on context (especially adverbs/phrases of time) for their interpretation than do verbs in English. (Dutton 1973:79)

Dutton suggests that *bin* originated in New Britain and was made popular by radio announcers, while Mihalic notes that it is used 'especially in the Rabaul and Morobe areas' (1971:72).

In both Bislama and Tok Pisin, *bin* does not occur as a main verb, nor is it an adverbial component of the verb phrase, as is the case with most aspect markers. In most grammars, *bin* is treated as a past tense marker (cf. Mosel 1980:123; Wurm 1971:47; Guy 1974:17), and it may be the case that in regional variants using the lexeme it is used as such. In West New Britain, however, it is used only occasionally as an anterior marker (*ant*), indicating that the action referred to took place sometime before the time set in the discourse, what Camden (1979:95), in his discussion of *bin* in Bislama, refers to as an 'antecedent'. This is comparable to Tryon's statement regarding its use in Bislama to indicate 'that the action of the verb is outside the sequence of the action of surrounding verbs' (1988a:121). In this usage, it is introduced to set the time frame (as is done with time adverbs), then omitted until such time as a different time frame setting is required:

*dispela ensin mi (bin) bai-im long taun, i bruk pinis*  
 this engine 1s (ant) buy-tr loc town sr break comp  
 That engine I bought in town has broken.

Tense systems can be found in some MNAN languages, but many, like Tok Pisin, do not mark tense. Unfortunately, analyses of MNAN languages often failed to distinguish among tense, aspect and mood until recently, and they tended to describe these languages in terms of European tense

systems, using terms such as 'past', 'present' and future. In particular, those languages which have a 'future' marking, but no past or present marking, may be making a distinction between two moods: irrealis and realis (see section 6.4), but whether a true future or an irrealis is involved is not always clear from the descriptions.

### 6.2.1 PRESENT TENSE

Of the Vanuatu languages in the sample, only two are described as having a specific marker denoting present tense: Ambrym (*-m*) and Sie (*am-*). As discussed above, the present tense usually coincides with progressive or continuative aspect, and it is often difficult to tell which is actually involved. Lynch says of the present tense morpheme *am-* in Sie that it refers 'to an action which is taking place at the moment of speaking, or to a habitual action' (1983:26). The related languages of southern Vanuatu, Lenakel and Tanna, have a morpheme *am-* that appears to be cognate with Sie *am-* (and perhaps Ambrym *-m*) and that indicates progressive or continuous aspect (see section 6.3.3). This suggests that the Sie morpheme has aspectual content, a situation that is similar with regard to Ambrym *-m*.

In several languages, a 'neutral' tense marker is found (RAGA *mwa*, MOTA *we*, SA'A *ko*, LONG and VATU *e*, NGGE (*t*)*e*, BUGO (*k*)*e*) which makes no reference to time and is used in narratives after tense has been established. Ivens suggests that these particles 'mark a word as a verb' (1935a:157) and so they are translated as verb markers (*vm*) in the appendices, not as present tense markers.

Kolia (1975) describes Balawaia as having a set of present tense subject pronouns which are prefixed to the verb; these contrast with nonpresent tense prefixes.

### 6.2.2 PAST TENSE

A number of MNAN languages possess past tense marking. Lenakel and Tanna have the prefixes *im-* and *imn-* respectively. Sie distinguishes between past and non-past by changes in the initial consonant of the verb root: oral consonants (C-, e.g. *velam* 'come') for past tense versus prenasalised consonants (nC- e.g. *a.mpelam* 'come') for future and present tense:

In Sie, this oral/nasal alternation occurs, in various forms, with a large number of verb roots, though not all. The oral grade is used in the past tenses and the past conditional, while the nasal grade is used in the non-past tenses (present, future, and future conditional tenses) – i.e. the distinction can loosely be termed a realis/irrealis distinction. (Lynch 1983:24)

Ambrym has a past suffix *-d ~ -r ~ -t* which is affixed to the subject pronouns. Raga and Mota have free forms, *nu* and *me* respectively. While Tolai has no simple past tense marker, it possesses a recent past particle *kabur* and a remote particle *ga* indicating remote past (or remote future when coupled with the future particle). This remote particle appears to be related to the Tigak past tense marker *ga* which combines with the subject pronouns. Finally, Balawaia has a set of definite non-present pronouns which appear to act as past tense forms (cf. Kolia 1975:154), e.g. *ba-* first person singular.

## 6.2.3 FUTURE TENSE

Lenakel and Tanna have a future prefix *t-*. Immediate future is indicated by a combination of the future morpheme *t-* and the progressive aspect morpheme *ak-* (see section 6.3.3). The remote future is indicated by the combination of the future morpheme *t-* and the sequencer aspect morpheme: LENA *ep-*, TANN *epi-*. Schütz (1969a:28) describes *woo* in Nguna as a 'future' marker, although there is no past or present marking. In Ambrym, a future form in *b-* occurs in the third person singular with a variable vowel; otherwise the future is unmarked, with the option of using the free morpheme *bwica* to mark futurity (the portmanteau third person singular future *b-* appears to be related to *bwica*). Raga and Mota have the future proclitics *vi* and *te* respectively. The Solomon Islands languages in the sample (Arosi, Sa'a, Kwaio, Longgu, Vaturanga, Nggela and Bugotu) also have future proclitics, but present and past are unmarked. This future/non-future dichotomy, and the use of these same future particles to mark subjunctive, conditional and imperative in some languages, suggests instead an irrealis/realis distinction. The future is marked in Tolai by a suffix *-na* affixed to singular pronouns (the third person singular is *na*) and *a* which follows the non-singular pronouns. Although the present and past tenses are unmarked, the future tense marker is distinct from the irrealis marker *gala*. The Tigak future morpheme *vo* accompanies the non-past forms, while Balawaia has a set of indefinite non-present pronouns which may represent future tense forms (cf. Kolia 1975:154), e.g. *bana-* first person singular.

## 6.2.4 DISCUSSION

Table 9 presents a summary of the tense markers described for the above languages. In the case of Balawaia, the first person singular pronouns are provided:

TABLE 9: TENSE MARKERS IN MNAN LANGUAGES

	PRESENT	PAST	FUTURE	NEUTRAL
LENA	-	<i>im-</i>	<i>t- (...-ep-)</i>	-
TANN	-	<i>imn-</i>	<i>t- (...-epi-)</i>	-
SIE	<i>am-</i>	-	-	-
NGUN	-	-	<i>woo</i>	-
AMBR	<i>-m</i>	<i>-r</i>	<i>bwica</i>	-
RAGA	-	<i>nu</i>	<i>vi</i>	<i>mwa</i>
MOTA	-	<i>me</i>	<i>te</i>	<i>we</i>
AROS	-	-	<i>-i</i>	-
SA'A	-	-	<i>ke</i>	<i>ko; e</i>
KWAI	-	-	<i>ta-</i>	-
LONG	-	-	<i>go; nge</i>	<i>e</i>
VATU	-	-	<i>ke</i>	<i>e</i>
NGGE	-	-	<i>ke; nge</i>	<i>(t)e</i>
BUGO	-	-	<i>da</i>	<i>(k)e</i>
TIGA	-	<i>ga</i>	<i>vo</i>	-
TOLA	-	-	<i>-na/a</i>	-
BALA	<i>a-</i>	<i>ba-</i>	<i>bana-</i>	-

Table 9 shows the degree to which a tripartite tense system is uncommon in MNAN languages. The present tense (if it is indeed a tense and not an aspect) is found only in Sie, Ambrym and

Balawaia. Although past tense marking occurs, it is most common in southern Vanuatu and infrequent elsewhere. Future marking is widespread, although in many instances this may turn out to represent irrealis marking, rather than tense. 'Neutral' tense (or verb marking particles) are restricted to northern Vanuatu and parts of the Solomon Islands, contiguous areas geographically.

Pawley (1972:48) shows correspondences of reconstructed PEO tense-aspect particles in a number of Vanuatu and Solomon Island languages not discussed here, and the patterns just described appear to be consistent throughout Vanuatu and the Solomons.

### 6.3 ASPECT

Aspect in Tok Pisin is marked by the use of free morphemes; there are no aspectual affixes. Most of these aspect markers may also act as main verbs, whence they are derived. In MNAN languages, both affixation and free morphemes are used to mark aspect.

#### 6.3.1 ABSENCE OF ASPECT MARKING

In Tok Pisin, a verb phrase lacking an overt aspect marker indicates simply that an event occurred or is occurring. In other words, the verb is unmarked for aspect, with no reference made to its inception, completion or duration:

*ol pikinini ol i ron i kam*  
 pl child 3p sr run sr come  
 the children come/came running

Lack of overt aspect marking is also possible in MNAN languages (see Appendix XI for examples). In some of these languages, activity unmarked for aspect may represent a present (ongoing) event or a past event, with no reference to completion of the event or its duration through time. In other languages, this is possible only in a past context, and ongoing activity requires imperfective aspect marking (see section 6.3.3).

LUSI *ti-liliu pa eau*  
 3p-bathe loc water  
 TP *ol i waswas long wara*  
 3p sr bathe loc water  
 they are/were bathing in the river; they bathed in the river

Table 10 shows instances of utterances lacking aspect marking found among the sample MNAN languages. Positive (+) occurs only in the present and indicates that imperfective aspect marking is required. Negative (-) indicates instances of no overt aspect marking.

TABLE 10: ABSENCE OF ASPECT MARKING

	ONGOING PRESENT	AORIST PAST
LENA	+	-
SIE	+	-
PAAM	-	-
PORT	-	-
NAMB	-	-

TANG	-	-
RAGA	-	-
MOTA	-	-
AROS	-	-
SA'A	-	-
KWAI	-	-
LONG	-	-
VATU	-	-
BUGO	-	-
TOLA	+	-
NAKA	+	-
LUSI	-	-
MANA	+	-

### 6.3.2 COMPLETIVE

The aspect marker that indicates completed action or completed change of state in Tok Pisin is *pinis* (BISL *finis*, PIJN *nao*). As a main verb, *pinis* can occur intransitively meaning 'be finished, done', 'all gone' or as a transitive verb meaning 'finish something'.

*pilai i pinis*  
party sr finished  
the party is over

*em i dai pinis*  
3s sr die comp  
he is dead

Completive aspect occurs in each of the sample languages examined here and shown in Table 11 below (see Appendix XII for examples). Completive aspect is marked in two different ways in these MNAN languages by affixation and by a free morpheme. In some languages, the marker is pre-verbal, in others it is post-verbal. The post-verbal free morphemes predominate, however, and thus resemble *pinis* in Tok Pisin (and BISL *finis*). Tanna, Nambas and Balawaia have the possibility of using either an affix or a free morpheme.

The completive is very commonly used to indicate a completed change of state, as in Tok Pisin:

LUSI	<i>i-mate</i> 3s-die
TP	<i>em i dai</i> 3s sr die he is dying/unconscious; he fainted
LUSI	<i>i-mate gasili</i> 3s-die comp
TP	<i>em i dai pinis</i> 3s sr die comp he is dead

TABLE 11: COMPLETIVE ASPECT MARKERS IN MNAN LANGUAGES

	PRE-VERBAL	POST-VERBAL
LENA	-	<i>ua</i>
TANN	<i>ua-</i>	<i>ta</i>
SIE	-	<i>-su</i>
NGUN	<i>poo</i>	-
PAAM	-	<i>tai</i>
AMBR	-	<i>bur</i>
PORT	-	<i>inong</i>
NAMB	<i>ta-</i>	<i>sare</i>
TANG	-	<i>moiso</i>
RAGA	-	<i>hupa</i>
MOTA	-	<i>veta</i>
AROS	-	<i>no?a</i>
SA'A	-	<i>?oto</i>
KWAI	-	<i>no?o</i>
LONG	-	<i>na</i>
VATU	-	<i>noho, na</i>
NGGE	-	<i>tua</i>
BUGO	-	<i>gohi, hi, ngovu</i>
TIGA	<i>pon</i>	-
TOLA	<i>tar</i>	-
NAKA	-	<i>-ti</i>
LUSI	-	<i>gasili</i>
MANA	-	<i>-doi</i>
BALA	<i>ywarau</i>	<i>-to</i>

### 6.3.3 IMPERFECTIVE

Three possible distinctions are examined here: progressive, durative and habitual. The progressive aspect indicates that the action is ongoing or is occurring at the same time as another event, making no reference to its completion (e.g. 'I am/was eating, when....'). The durative marks the action as one which extends through time, with the possibility of indicating that a greater or lesser length of time is involved (e.g. 'I keep/kept eating'). The habitual indicates that an action occurs regularly (e.g. 'I eat/ate every day').

The distinction between these is subtle – they all overlap and may co-occur. As Dahl (1985:91) notes, the distinction between progressive and durative is often confused, since ongoing action necessarily includes some continuation through time. The durative, however, is generally used to focus on the extension of an activity through time (e.g. 'he kept singing until he became hoarse'), whereas the progressive relates an ongoing activity to another event (e.g. 'he was singing when I entered the room').

The progressive is marked in Tok Pisin by *stap* or by *wok long*. Although progressive aspect may be left unmarked, the progressive marker is used to emphasise the fact that the action is ongoing. *stap* is used in two ways in Tok Pisin, either as *stap* + V or as V + *i stap*, while *wok long* occurs

in the frame *wok long + V*. In Bislama, *stap* is also used in the frame *stap + V*. The construction using *wok long* may be a Tok Pisin innovation, and so the present investigation focuses on the use of *stap* as a progressive marker:

*ol i stap toktok*  
 3p sr prog talk  
 they are having a discussion

In West New Britain at least (and this may extend to varieties with which I am not familiar), there is a subtle difference in meaning between the construction using *stap + V* and that using *V + i stap*. While both are progressive forms, the second has, in addition, a locative nuance. The difference is best presented in the following:

*em i stap wok long gaden*  
 3s sr prog work loc garden  
 he is working in the garden

*em i wok long gaden i stap*  
 3s sr work loc garden sr stay  
 he is in the garden, working

Duration of an event may be signalled in Tok Pisin by the repetition of *i go* after the verb or by repetition of the main verb. This device is particularly common in narratives, where the number of repetitions suggests the degree of duration of the event (I have heard up to ten repetitions in discourse):

*mipela i wet i go i go i go i go*  
 1x sr wait sr go sr go sr go sr go

= *mipela i wet i wet i wet*  
 1x sr wait sr wait sr wait  
 we waited for quite a while; we kept on waiting; we waited and waited

The reiteration of *i* in the repeated segments is variable, in that some varieties of Tok Pisin do not repeat it, as in *mipela i wet wet wet*. In West New Britain, the *i* is usually reiterated and replaces the subject referencing pronouns *mi*, *yu* and *yumi*; in addition, the vowel of the final instance of *go* is often lengthened, as in *mi wet i go i go i go i goooo* 'I kept on waiting'. Comparable constructions occur in Bislama, and in Pijin:

BISL *mivala i wet i ko ko ko ko, per i no kam*  
 1x sr wait sr go go go go Father sr neg come  
 we waited and waited, and eventually the Father did not come (Guy 1974:38)

PIJN *hem-i mek-em finis stik-im stik-im goo-go fit-im...*  
 3s-sr make-tr be complete insert-tr insert-tr go-go fit-tr  
 he made it, drilled it, drilled it until it was the size... (Keesing 1988b:237).

To indicate that someone regularly engages in an activity, the habitual marker (hab) *save*, also found in Bislama and Pijin, is used. *save* also occurs as a main verb with the meaning 'to know' and as an auxiliary verb meaning 'to be able', marking competence. These are all semantically related concepts, since the ability to do something often rests on the knowledge of how it is done, and, as Dutton explains, 'one gains one's competence to perform an action from having performed it



regularly or habitually' (1973:75). Compare the Bislama sentence: *Pita i save kakae fis* (Tryon 1988a:107) with the Tok Pisin equivalent:

*Pita i save kaikai pis*  
 Peter sr hab eat fish  
 Peter eats fish (or Peter is a fish-eater)

The imperfective aspects may be marked in a number of different ways in MNAN languages, and the following means are found in the sample languages: (1) affixes, (2) free morphemes, (3) reduplication, (4) repetition of the verb, and (5) the use of co-verbs. Combinations of these various means also occur. MNAN languages differ in the number of distinctions made. Lusi, for example, does not mark a progressive or a habitual, although repetition of the verb is used to indicate duration. In some languages, the same marking is used to indicate two or more imperfective aspects.

(1) Affixation is most common in Vanuatu languages and rare elsewhere. The southern Vanuatu languages, Lenakel, Tanna and Sie, all possess prefixes that follow the subject pronouns. Lenakel and Tanna both have a prefix *ak-* which indicates that 'part or all of the action is occurring at the time of speaking or in the narrative present, or that the action is habitual' (Lynch 1978:47); in other words, this prefix appears to function as both a progressive and a habitual marker (Lynch uses the term 'concurrent' for this prefix). The Sie present tense morpheme *am-* has the same functions (Lynch 1983:26). A cognate morpheme *am-* occurs in Lenakel and Tanna and 'indicates that the action is progressive or continuous' (Lynch 1978:52); this functions, then, to indicate durative aspect (Lynch uses the term 'continuative'). The two prefixes may co-occur in Lenakel or Tanna to indicate a present progressive action. As mentioned earlier, the distinction between progressive and durative is often difficult to make. While I interpret Lynch's concurrent prefix as a progressive marker where it indicates ongoing action (or as a habitual marker where appropriate), and his continuative prefix as a durative marker since it involves continuous action, the functions of the two prefixes appear to overlap, and Lynch's emic terms for these prefixes accurately reflects their language-specific usage. Ambrym has a suffix *-m* which Paton (1971:50) describes as a present tense marker. Similarity in form to the progressive marker in other MNAN languages (cf. Lenakel, Tanna and Sie) suggests that this may be a progressive suffix, but the evidence is inconclusive. Port Sandwich has a prefix *ri-* which marks 'une action en train de se dérouler' (Charpentier 1979a:159) or a progressive. Comparable prefixes are found in the other languages of South Malekula (Charpentier 1979b:350). Big Nambas has a habitual prefix *mu-* which occurs with reduplicated verb stems and a durative prefix *d-* which indicates action that is still going on. Balawaia has a 'continuous' suffix *-ni* which marks progressive and habitual aspects. In addition, there is a habitual suffix *-yoni*, which indicates an action that was habitual in the past but is no longer so.

(2) Free morphemes are used in Nguna, Ambrym, Tangoan, Mota, Nggela and Tolai to indicate habitual and/or progressive aspects.

(3) Reduplication is frequently used throughout Melanesia to mark imperfective aspects, as in Kwaio where reduplication can mark both durative and habitual (Keesing 1985:63). Lusi provides an example of a durative marked by reduplication:

LUSI     *ga-sim=simi ga mao*  
           1s-rd=seek and neg  
 TP       *mi pain-im, pain-im, nogat*  
           1s seek-tr seek-tr neg  
           I looked for it in vain

(4) MNAN languages, like Tok Pisin, also employ repetition of the main verb to indicate a prolonged activity. In every example found, repetition marks duration. In Big Nambas, Kwaio and Manam, the verb *go* is repeated as is the case in Tok Pisin.

(5) The final type of construction uses a sequence of verb phrases. These mark progressive and durative, and are either verbs of rest (stay, sit, lie) or the verb *go*, as in Arosi, which may use *?ari* 'go' to mean 'go on, continue' (Capell 1971:26).

Table 12 summarises the findings, and examples are provided in Appendix XIII. Since many descriptions are incomplete in their discussion of aspect marking, there remain a number of gaps. In the table are found instances of imperfective marking that may not be productive (for example the use of reduplication in Arosi to mark a durative), included here because of their similarity to imperfective marking in Tok Pisin.

TABLE 12: IMPERFECTIVE MARKING IN MNAN LANGUAGES

	PROGRESSIVE	DURATIVE	HABITUAL
LENA	<i>ak-</i>	<i>am-, rep</i>	<i>ak-, rd</i>
TANN	<i>ak-</i>	<i>am-, rep</i>	<i>ak-</i>
SIE	<i>am-</i>	<i>stay</i>	<i>am-</i>
NGUN	<i>too</i>	-	<i>too</i>
PAAM	<i>velahi, rd, stay</i>	<i>rep</i>	<i>rd</i>
AMBR	<i>ye, rd</i>	<i>rd, stay, go</i>	-
PORT	<i>ri-</i>	-	-
NAMBAS	-	<i>d-, rep</i>	<i>mu</i>
TANG	<i>lo</i>	-	<i>eñi</i>
MOTA	<i>rd</i>	<i>ti, rd</i>	<i>ti</i>
AROS	<i>rd</i>	-	-
SA'A	<i>rd</i>	-	-
KWAI	-	<i>rd</i>	<i>rd</i>
VATU	-	<i>rep</i>	-
NGGE	<i>soo</i>	<i>rd, rep</i>	-
BUGO	-	<i>rep</i>	-
TIGA	-	<i>rd, rep, go on</i>	-
TOLA	<i>rd</i>	<i>rep</i>	<i>la, rd</i>
NAKA	<i>rd</i>	<i>rep</i>	<i>rd</i>
LUSI	-	<i>rd, rep</i>	-
MANA	<i>rd, sit</i>	<i>rep, lie</i>	<i>rd</i>
BALA	<i>-ni</i>	<i>go</i>	<i>-ni; -yoni</i>

#### 6.4 MOOD: REALIS/IRREALIS

An important distinction is made in Tok Pisin between real events (realis), indicating that the action has occurred or is occurring, and unreal events (irrealis) marked by *bai* (or the longer form *baimbai* ~ *bambai*), events that have not occurred at the time of the speech act. The irrealis is often treated as a future tense in grammars of Tok Pisin (cf. Wurm 1971:47), but its use covers more than simple futurity, since it expresses the truth-value of an event from the speaker's point of view, and so it is interpreted here as mood, not tense. The confusion may result from the facts that future tense is

inherently irrealis, since the future tense describes not-yet-real events, and the English future is translated by the irrealis in Tok Pisin. On the other hand, it is quite possible that certain dialects, such as that described by Wurm, use *bai* as a future marker comparable to tense markers in the substrate languages. In West New Britain, however, *bai* is best analysed as an irrealis. As such, it may be used in past tense frames in which a projected action has not yet been realised, as in desiderative constructions, indirect speech and conditionals (where English uses modals such as *would* and where other European languages may have subjunctives):

*asde mi laik bai yu go Kimbe*  
 yesterday 1s want irr 2s go Kimbe  
 yesterday I wanted you to go to Kimbe

*em i tok (olsem) bai i kamap tete long moning*  
 3s sr say (thus) irr sr arrive today prep morning  
 he said he would come this morning

*sapos dokta i no kamap, bai em i dai pinis*  
 if doctor sr neg arrive irr 3s sr die comp  
 if the doctor hadn't come, he would have died

The realis is unmarked in Tok Pisin, but the irrealis is indicated by the use of *ba(i)mbai* which is currently used most frequently in its shortened form *bai*. This particular morpheme is widely distributed among Pacific lingue franche (cf. Clark 1979:10-11) – as in PIJN *bae(bae)* and BISL *(bam)bae* – and is derived from the English form ‘by-and-by’ which indicates a general future time:

*bai mi kam long singsing*  
 irr 1s come loc dance  
 I will come to the dance

The realis/irrealis distinction is widespread among MNAN languages. Two main structures are used to mark the realis/irrealis dichotomy. The first is the use of two distinct sets of subject pronouns, one for realis, the other for irrealis. In these languages, the marking is obligatory. Paamese has three sets of pronouns: realis, immediate irrealis (*imm*) and distant irrealis (*dis*). Immediate irrealis ‘expresses the idea that there is some connection between the time of an utterance and the non-real event that is expected by the speaker to become real’ (Crowley 1982:136). The distant irrealis ‘expresses a non-real event that has no connection with the time of utterance’ (Crowley 1982:137). These pronouns are affixed to verb roots in which initial consonant alternations indicate realis (e.g. *vaa* ‘go’) and irrealis (e.g. *haa* ‘go’); vowel-initial verbs take *um-*. In Manam, the irrealis pronouns may also be used to indicate a sequence of events which occur habitually (Lichtenberk 1983:189). In Sie, there is no change in pronominal forms, but the realis/irrealis distinction is encoded in the verb stem itself. Oral-grade consonants indicate realis (e.g. *taloŋi* ‘kill’) and nasal-grade consonants indicate irrealis (e.g. *ntaloŋi* ‘kill’). The oral-grade verb without aspect marking is a simple past, while the nasal-grade without aspect marking is a future. Present tense must be accompanied by the imperfective morpheme *am-* (see section 6.3.3). Sie is unusual in using the irrealis (non-past) form of the verb for present tenses.

In other MNAN languages, there is a free morpheme or a prefix which indicates irrealis. Although Port Sandwich lacks irrealis marking, the related languages of Malekula have irrealis prefixes, and Nasariana is provided as an example in Appendix XIV. In addition to realis and irrealis pronouns, Manam has an ‘indefinite irrealis’ morpheme *masa*, and a ‘prospective’ marker *ʔana*. The irrealis

pronouns may occur with or without the indefinite irrealis morpheme *masa*. The likelihood of the event occurring when only the irrealis pronouns are present in a sentence is more definite. The use of *?ana* indicates that the event is imminent, and it can also translate a desiderative (these are also the functions of TP *laik*). *masa* is unmarked for certainty or for imminent occurrence.

Table 13 presents the irrealis marking of the sample MNAN languages. In the case of realis and irrealis pronouns, the first person singular forms are provided for comparison.

TABLE 13: REALIS/IRREALIS MARKING IN MNAN LANGUAGES

	AFFIXED/FREE	STEM		PRONOMINAL	
	irrealis	realis	irrealis	realis	irrealis
SIE	-	C	nC	-	-
PAAM	-	C1	C2	<i>na-</i>	<i>ma-; ni-</i>
NASA	<i>mbør-</i>	-	-	-	-
NAMB	-	-	-	<i>n-</i>	<i>p'a-</i>
TANG	-	-	-	<i>a-</i>	<i>na-</i>
TOLA	<i>gala</i>	-	-	-	-
NAKA	<i>ge</i>	-	-	-	-
LUSI	<i>tau</i>	-	-	-	-
MANA	<i>masa; ?ana</i>	-	-	<i>u-</i>	<i>n-</i>

## 6.5 SUMMARY

Although the above discussion does not exhaust the expressive wealth of modality marking in Tok Pisin and MNAN languages, it does focus on those features of Tok Pisin that show little or no resemblance to English while reflecting MNAN semantics. It is evident from the preceding discussion that certain modalities are widespread among MNAN languages, although there is variation in the syntactic expression of these modalities.

The literature on pidginisation shows that one of the first products of simplification is the loss of modality. Tense marking in English is quite complicated owing to the numerous allomorphs of both the present and the past tenses. Consequently it is not surprising that tense is lost in the limited contacts that lead to pidginisation. In Melanesia, where tense is far from universal and varies greatly depending on which tenses are marked, the possibility of learning the English tense system is even slimmer. English aspect marking is dependent upon various auxiliary verbs, especially 'have' and 'be', both of which show allomorphic variation. These and other auxiliaries must combine with participial forms derived by suffixation which again show allomorphic variation. Since the initial learning stage of pidginisation sees the loss of English function words and affixes, the basis upon which tense and aspect are formed in English is gone.

Having acquired a smattering of English lexical items, predominantly content words, the Melanesians begin to experiment with marking those modalities that are important to them in communicating in their native languages. According to Keesing (cf. 1988a:48) several modality markers were already present in Pacific pidgin, and these were readily adopted by Melanesians, who standardised their usage following substrate semantics. One of the first needs is for a realis/irrealis distinction, since in many MNAN languages this distinction is obligatory. In other MNAN languages, the future tense is well known, whereas present and past marking are less common. The

English phrase 'by and by', used in CPE (Clark 1979:11) and found in the Pacific pidgin described by Keesing (1988a), is adopted as a monomorphemic lexical item and interpreted as a future or as an irrealis marker, depending upon the substrate model. Even today there appears to be variation in the use of this marker, but because of the overlap between irrealis and future, discussed earlier, it is of little communicative importance whether a given speaker uses this marker as a tense or as a mood.<sup>5</sup>

A similar interpretation problem exists in the case of *bin*. Its use as a past tense marker was accepted in areas where past tense marking is found, whereas the widespread absence of such marking worked against its spread and stabilisation in other areas. Its use in the Bislama dialects spoken in southern Vanuatu corresponds to the presence of past tense marking in the languages spoken there. Similarly, the absence of past tense marking in the Solomon Islands languages is reflected by the absence of *bin* in Pijin (cf. Keesing 1988a:178ff). Past tense is found in some New Ireland languages, however, and this is likely to be the reason behind the statements given earlier regarding the origin of *bin* in the Rabaul region. A second factor often proposed to account for the distribution and instability of *bin* relates to Charpentier's observations on Bislama:

In the region of the capital Port Vila and among the young people educated in British schools, a durative past aspect is in usage. It is expressed in this regional pidgin by *bin* < *been*. We do not know whether this is a borrowing or if this usage is the result of education or a characteristic of the local languages...This aspect marker *bin* is not part of the lexicon of the pidgin [old Melanesians in South Malekula] speak. Such an aspect marker does not exist in the vernacular languages of this region. (1979b:353 – my translation)

That this is not a recent borrowing is clear from Keesing's (1988a) evidence for *bin* in a Pacific-wide pidgin. Its distribution as a past tense marker in non-Pacific pidgins and creoles, as well as Black English in the United States suggests that it was a familiar 'foreigner talk' device for many English-speakers and entered the Pacific lingua franca earlier on. The association of *bin* with education and the concomitant learning of English, its use in an anglicised urban register (as in radio broadcasts), as well as the need of English-speakers for a past tense marker when speaking 'pidgin' (in my own experience, they tend to overuse *bin*) all suggest that superstrate influence is a principal force in the maintenance of this form. Nonetheless, it has not been well integrated into the Bislamic languages due to the largely foreign nature of past tense marking, and where it is used its semantic content has been interpreted in various ways, for example as a discourse device marking anterior action (MNAN languages have various discourse means for the same purpose) or as a simple past tense. The erratic spread and variable function of *bin* can also be attributed in part to the competing aspect marker *pinis*; Pijin appears to have resolved the competition by rejecting both functors and adopting *nao* (see Simons 1985, Keesing 1985, 1988a:178). To answer Charpentier's puzzlement as to its origin, it is likely that the substrate-influenced usage of *bin* as a past tense marker was reinforced by its superstrate-influenced usage, while, at the same time, the lack of past tense marking in other substrate languages has discouraged its spread and the stabilisation of its function.

The completive aspect is present in virtually all MNAN languages. The structure of the English perfective aspect, generally expressed as 'have' plus the past participle of the verb (e.g. 'I have gone', 'I have eaten') is foreign to MNAN languages. The semantic transparency of 'finish', however, makes it ideal for marking completion. Consequently, this content word is adapted to the Melanesian need for a completive aspect marker in favour of the function word 'have', which in fact never enters MPE even as a main verb. An interesting development in this area is found in the English of expatriates residing in Papua New Guinea: they have borrowed the Tok Pisin completive

construction in the expression *go finish*. *Tropo went to Australia* implies that Tropo will return, that is, that he went to Australia for a visit, whereas *Tropo went finish to Australia* means he has moved back to Australia permanently.

Like 'finish', which entered MPE as a main verb and is also used to mark completive aspect, so 'stop', which entered MPE as a locative verb *stap* 'be in a place, stay, dwell' (on the model of MNAN locative verbs with this meaning), is also extended to usage as a progressive aspect marker. Similar transformations are currently being applied to *wok* 'work' in Tok Pisin. The extension of *stap* (from English *stop* in the sense of 'stay') to usage as a progressive aspect marker correlates neatly with a few MNAN languages which use a locative verb either as a progressive or as a durative. Imperfective aspect is widely marked in MNAN languages, and given the limited choice of lexical items, *stap* was a logical verb to use in this function. The English construction again uses an auxiliary verb and a participle ('be V-ing'), and requires knowledge of the allomorphs of the function word and the foreign use of a suffix.

Reduplication was another possibility for marking imperfective aspects, as it is widespread among MNAN languages, where its function, however, varies considerably. In addition to its role as an aspect marker (durative, progressive, habitual), it may also mark plurality of subject or object, intensity of action, or diminution. It may be used to derive intransitive verbs from transitive verbs (see section 7.3.1) or to indicate reciprocal and/or distributive verbs. Tok Pisin does in fact use reduplication in a limited way in some of these capacities (see Charpentier 1979b:289ff for Bislama examples), but it is either lexicalised or regionally variable. At any rate, this confusing multiplicity of functions suggests that reduplication was less successful as an aspect marker than simple extension of the locative verb *stap*. In recent years, however, I have noticed an increase in the use of reduplication to mark imperfective aspect in the Tok Pisin of West New Britainers, even in cases where another imperfective marker is present:

*ol i wok long kat=kat-im divai*  
 3p sr prog rd=cut-tr tree  
 they were busy chopping down the tree

Extension of main verbs to aspect markers also applies to *save* 'know' and to *go* 'go'. In the case of *save*, the semantic extension from 'know how' to habitual aspect was described in Section 6.3.3. Again, a common MNAN aspect marking is fulfilled. The habitual in English is usually unmarked, that is, it is indicated by the absence of the progressive 'be V-ing' construction (e.g. 'I make canoes') or past tense. The unmarked Tok Pisin structure *mi wokim kanu* 'I made a canoe', lacks any aspectual information but the habitual requires *save*: *mi save wokim kanu* 'I make canoes'.

The repetition of *go* after verbs to indicate prolonged activity occurs in some MNAN languages, especially in narratives, and is closely allied to repetition of the verb itself, which is very widespread among MNAN languages. Again, the English verb 'keep' as in to 'keep eating' was not adopted by the Melanesians. It should be noted that English also uses repetition to mark duration or iteratives, as in: *he kept on writing and writing*, and such models may have played a role in the introduction of this device in MPE. Furthermore, the semantic transparency of repetition was undoubtedly involved.

Similar solutions to the problem of aspect marking were adopted in both Hiri Motu and Plantation Pidgin Fijian (henceforth PPF). In Motu, tense is marked by several sets of subject pronouns, as discussed for Balawaia, a closely related language. In Hiri Motu, the complex subject pronouns are lost and the future is indicated by *dohore* 'presently', just as Tok Pisin adopted English *by and by*:



evidence for the ways in which Melanesians themselves use simplified language and resolve communication problems in such codes. Such research may also discover if such strategies were extended to MPE.



## CHAPTER 7

### GRAMMATICAL ROLES IN THE SENTENCE

#### 7.1 INTRODUCTION

This chapter focuses on those elements of the verb phrase that mark grammatical roles, in particular the means used to mark the subject and to distinguish transitive verbs from intransitive verbs. Also examined is the use of serial verbs with verbs of motion.

#### 7.2 SUBJECT REFERENCING

A feature of Tok Pisin which differentiates it from English is the obligatory use of what is widely known as the 'predicate marker' before the verb phrase. The Tok Pisin morpheme *i* (< *he*) occurs after certain pronouns and after noun phrases when these are the subject of the sentence. The simple pronouns *mi*, *yu* and *yumi*, however, may also act as predicate markers. Due to a similar situation in Pijin, Keesing (1988a:170) suggests that the term 'predicate marker', with its emphasis on the syntactic function of *i* in particular, detracts from the use of these forms as subject referencing pronouns. Analyses of *i* often miss its pronominal aspect, and the difference between the focal pronoun *em* and the subject referencing pronoun *i* in the third person singular suggests a similar analysis throughout the pronominal paradigm, even though (a) the phonological shapes of the focal pronouns do not always differ from their subject referencing pronouns, and (b) *i* is used with pronouns other than *em*. To understand subject referencing, a brief description of the Tok Pisin pronominal system is required.

##### 7.2.1 SUBJECT REFERENCING IN TOK PISIN

Most grammars of Tok Pisin set up a pronominal paradigm similar to the following:

	1(+3)	1+2	2	3
singular	<i>mi</i>		<i>yu</i>	<i>em</i>
dual	<i>mitupela</i>	<i>yumitupela</i>	<i>yutupela</i>	<i>tupela</i>
trial	<i>mitripela</i>	<i>yumitripela</i>	<i>yutripela</i>	<i>tripela</i>
plural	<i>mipela</i>	<i>yumi</i>	<i>yupela</i>	<i>ol</i>

The *yumi* forms represent first person inclusive pronouns (1n) which include the hearer (you and I). The *mitupela*, *mitripela* and *mipela* forms are first person exclusive pronouns (1x) which exclude the hearer (they and I). The distinction between dual (two persons) and trial (three persons) is optional in some dialects.

The system described above, however, fails to capture some important facts underlying the use of these pronouns and their relationship to *i*.

(1) The pronouns *yu* and *mi* do not occur with *i*. Nor does *yumi*, which is constructed from the simple pronouns *yu* and *mi* to create a first person inclusive pronoun. The exclusive/inclusive distinction is based on its presence in almost all MNAN languages. The creation of *yumi* to act as a first person inclusive pronoun is a transparent solution to the need for such a form and makes use of the two pronouns available in the antecedent Pacific pidgin. I shall refer to *mi*, *yu* and *yumi* as 'simple' pronouns for reasons which will become apparent.

(2) The simple pronouns *mi*, *yu* and *yumi* contrast with the other pronouns and with subject nouns which must occur with *i*. If *mi*, *yu*, *yumi* and *i* are construed as members of the same class, then they cannot co-occur. On the other hand, the other pronouns constitute a different class which requires *i*:

<i>mi go</i>	* <i>mi i go</i>	I went
<i>yu go</i>	* <i>yu i go</i>	you (2s) went
<i>yumi go</i>	* <i>yumi i go</i>	we (1n) went
<i>man i go</i>		the man went
<i>(em) i go</i>		he/she/it went
<i>mipela i go</i>		we (1x) went
<i>yupela i go</i>		you (2p) went
<i>ol i go</i>		they went

In some dialects, but not in West New Britain, it is possible to use *i* after *yu* in imperatives, (e.g. *yu i go!* 'go!').

(3) There are other ways in which the simple pronouns and the pronouns which require the predicate marker *i* differ. Firstly, some pronouns are derived pronouns. To form the first person exclusive plural and the second person plural pronouns, the singular forms *mi* and *yu* were provided with a plural suffix *-pela* to create *mipela* and *yupela*. The *-pela* suffix changes the form from a simple pronoun to a derived pronoun. This is also the case when *-tupela* 'two' and *-tripela* 'three' are added to *mi*, *yu* and *yumi* to form the dual forms *mitupela*, *yutupela* and *yumitupela* and the trial forms *mitripela*, *yutripela* and *yumitripela*. In most dialects of Tok Pisin, *i* is required after the derived pronouns, including the dual and trial first person inclusive forms, but not after the simple pronouns. Some dialects, however, use *i* only after *em* and *ol* (cf. Laycock 1970:xx; Wurm 1971:18). These dialects of Tok Pisin thus do not distinguish between simple and derived, but between third person and non-third person pronouns.

Secondly, the third person pronouns *em* (< *him*) and *ol* are neither derived nor simple pronouns, but are forms with functions other than their pronominal usage. *em* can act as a focal pronoun or as a demonstrative that emphasises, contrasts or indicates a switch of reference, and in this role can

precede a noun or even another pronoun. Its meaning 'yes' is an extension of this demonstrative function: *em* is used to indicate agreement, as in 'that's it, that's right, that's the one'.

*em man ia i nogut*

3s man this sr bad

this man is evil

*mama i pain-im papa, tasol em i go pinis*

mother sr seek-tr father but 3s sr go comp

mother was looking for father, but he had already left

*em tasol!*

3s only

That's it! That's the one!

*em mipela tasol bai i stap*

3s 1x only irr sr stay

we're the only ones who will stay

The focal pronoun *em* need not occur in a sentence, and so *i* frequently occurs without *em* (e.g., *i go pinis* 'he has gone'). When *em* is present, however, it does not usually occur without the subject referencing pronoun *i* even in those dialects which do not use *i* after the derived pronouns (although there are some dialects which do not use *i* after *em* either). It must be noted, however, that some equational sentences may occur without a verb *and* without *i*, and in these cases, one may find *em* as a subject without *i* (*em* in such sentences frequently has a demonstrative function):

*man bilong mi (i) bilong antap*

man poss 1s (sr) poss above

my husband is from the interior

*em (i) papa bilong mi ia*

3s sr father poss 1s this

he is my father

*em husat? em mi ia!*

3s who 3s 1s this

Who's that? It's me!

It is because of the existence of such sentences that Keesing (1988a:170) rejects the label 'predicate marker'; although it is usually the case that *i* indicates predicate onset, it is possible to have a predicate without a marker.

Finally, *ol* functions both as a prenominal plural marker and as a third person focal pronoun. Unlike *mipela* and *yupela*, which replace the plural suffix *-pela* with *-tupela* and *-tripela*, *ol* is replaced in the dual and trial by the numerals *tupela* and *tripela*. *ol*, like *em*, must be followed by *i*.

In Bislama, some dialects use *ol + i* in a manner identical to that of Tok Pisin (in the first example below, Camden writes *ol-i* as a single word). In these dialects, *ol* is a third person plural focal

pronoun, and *i* acts as the subject referencing pronoun. Other dialects, such as that described by Charpentier (1979b), use *olketa* (or *olgeta*) as a third person plural focal pronoun, and *ol-i* acts as the subject referencing pronoun:

- BISL      *ol man ol-i go*  
             pl man 3p-sr go  
             the men went (Camden 1979:79)
- olketa ol-i resis*  
             3p 3p-sr run  
             they are running (Charpentier 1979b:310)
- tuketa ol-i resis*  
             two 3p-sr run  
             the two of them ran (Charpentier 1979b:310)

*em* and *ol* behave like the derived pronouns in requiring *i*, so they are all members of a single class which I have labelled 'complex' pronouns, as against the simple pronouns which do not take *i*.

(4) The simple pronouns are repeated as a contrastive device equivalent in structure to *em i*, that is, first as a focal pronoun, then as a subject referencing pronoun:

- yu yu kis-im akis, mi mi kis-im bek*  
 2s sr:2s take-tr axe 1s sr:1s take-tr bag  
 you take the axe, I'll take the bag
- mi mi kis-im akis, em i kis-im bek*  
 1s sr:1s take-tr axe 3s sr take-tr bag  
 I took the axe, he took the bag

This same copying is found in certain dialects of Bislama and in Pijin (cf. Keesing 1988a:153):

- BISL      *yu yu dring finis*  
             2s sr:2s drink comp  
             you have drunk (Charpentier 1979b:351)

(5) In Tok Pisin, a subject referencing pronoun is required before the verb phrase when a pronoun is separated from the verb by another lexeme. Keesing (1988a:154-55) discusses the same phenomenon in Pijin. In New Britain at least, the usual practice is to repeat the simple pronouns *mi*, *yu* and *yumi* as the required subject referencing pronoun before the verb, although some dialects prefer *i* for this function.

- mi yet mi wok-im* or *mi yet i wok-im*  
 1s self sr:1s do-tr 1s self sr do-tr  
 I did it myself
- yu wanpela tasol yu go?* or *yu wanpela tasol i go?*  
 2s one only sr:2s go 2s one only sr go  
 are you going alone?

*yumi olgeta yumi go!* or *yumi olgeta i go!*  
 1n all sr:1n go 1n all sr go  
 let's all of us go!

The repetition *yumi...yumi* is less regular than *mi...mi*, perhaps due to its longer phonetic shape.

The complex pronouns cannot be repeated as subject referencing pronouns, but must use *i* before the verb:

*mipela olgeta i go* \**mipela olgeta mipela go*  
 1x all sr go  
 we all went

*yupela tasol i go?* \**yupela tasol yupela go?*  
 2p only sr go  
 were you the only ones who went?

(6) Related to (5) is the placement of the irrealis marker *bai* in a sentence. *bai* may occur in clause-initial position, or it may be moved to a position after the subject noun or pronoun, thereby placing the subject in focus position. In the latter case, the simple pronouns must have a subject referencing copy before the verb:

*bai mi go* > *mi bai mi go*  
 irr 1s go 1s irr sr:1s go  
 I will go

Some dialects use *i* as the subject reference, as in *mi bai i go*; in other dialects the subject reference may be absent, such as in *mi bai go*. Lack of a subject reference, however, is not standard usage and is considered bad form in New Britain. Since complex pronouns and nominal subjects are normally followed by *i* as subject reference, the movement of *bai* does not require the addition of a new pronoun:

*bai mipela i go* > *mipela bai i go*  
 irr 1x sr go 1x irr sr go  
 we will go

*bai man i go* > *man bai i go*  
 irr man sr go man irr sr go  
 the man will go

*em bai i go* > *bai em i go*  
 3s irr sr go irr 3s sr go  
 he will go

Compare the Bislama and Pijin examples below:

BISL *mi bae mi wok-em*  
 1s irr sr:1s do-tr  
 I'll do it

(Tryon 1988a:77)

BISL     *em bae i kuk-um*  
           3s irr sr cook-tr  
           she'll cook it

(Tryon 1988a:77)

PIJN     *iu bae iu mek-em*  
           2s irr sr:2s do-tr  
           you'll do it

(Keesing 1988a:155)

According to this analysis, then, there are two sets of pronouns for Tok Pisin: (1) the simple pronouns *mi*, *yu* and *yumi*, which have identical focal and subject referencing forms; and (2) the complex pronouns, made up of (a) derived forms: *yumitupela*, *yumitripela*, *mitupela*, *mitripela*, *mipela*, *yutupela*, *yutripela* and *yupela*, and (b) multifunctional *em* and *ol*. The complex pronouns are used as focal forms, but all use the same generalised subject referencing form *i*.

MNAN languages generally have two sets of pronouns. The 'focal' pronouns are always free forms and are used for emphasis, contrast or switch-reference. Another set of pronouns is closely associated with the verb phrase, often as prefixes but sometimes as free morphemes. These latter are usually referred to as 'subject' pronouns or 'subject referencing pronouns'. Nakanai is unusual in that it has only one set of pronouns, all free morphemes.

The subject referencing pronouns in MNAN languages (with the exception of Nakanai) are similar to those of Tok Pisin and its sister languages. First, these pronouns follow the focal pronouns (e.g. I, I go).

LUSI     *viau ŋa-ani mao, eai i-ani*  
           1s 1s-eat neg 3s 3s-eat  
 TP       *mi mi no kaikai-m, em i kaikai-m*  
           1s sr:1s neg eat-tr 3s sr eat-tr  
           I didn't eat it, he did

Second, when the argument is a noun phrase, the third person pronoun is redundantly present:

LUSI     *tanta i-la pa zazapa*  
           man 3s-go loc garden  
 TP       *man i go long gaden*  
           man sr go loc garden  
           the man went to the garden

Appendix XV provides examples of the redundant use of third person subject pronouns as predicate markers in MNAN languages.

### 7.2.2 DISCUSSION

The Tok Pisin pronominal system is very similar to that of MNAN languages, although the generalised use of *i*, where many MNAN languages have a full set of subject referencing pronouns which differ from the focal set, makes Tok Pisin simpler than many, albeit not all, MNAN languages.

Sankoff has also noted the similarity between predicate marking in Tok Pisin and MNAN: 'in this as in so many regards, Pidgin reproduces with largely English lexemes, Austronesian forms and modes of expression' (1977:128).

The use and non-use of *i* in Tok Pisin can be explained by establishing two different classes of pronouns: simple and complex. Although such pronominal classes are absent in MNAN languages, this difference is easily dealt with since the complex pronouns behave somewhat like noun phrases. Keesing (1988a:137) suggests that the use of *-fela* (TP *-pela*) as a plural suffix with the pronominal forms *mipela* and *yupela* derived from an extension of its use in other syntactic slots. In particular, *-pela* was affixed to attributive adjectives, including quantifiers such as in *sam-pela man i kam* 'some men came', and *tu-pela man i kam* 'two men came'. Analogy produced *mi-pela man i kam* 'we men came', in which *-pela* was added to *mi* (or *yu*) as it was added to *sam* 'some' or *tu* 'two'. Loss of the nominal head allowed quantifiers to act in a pronominal way – *sam-pela i kam* 'some came' and *tu-pela i kam* 'the two of them came' – and, following the same pattern, *mi-pela i kam* 'we came' resulted, creating a first person exclusive plural pronoun (and a second person plural pronoun). English speakers encountering forms like *mipela* or *yupela* for the first time could presumably interpret them as 'me fellows' and 'you fellows'.

Keesing's (1988a) analysis explains several aspects of the modern Bislamic system:

- (1) why *mipela* and *yupela* take *i* as a predicate marking pronoun instead of some derived, probably shortened, form (such as *mi*). The resumptive use of *i* (< *he*) after noun subjects had already been established (e.g. *man he come* > *man i kam*), and since the original phrases *mipela man* and *yupela man* contained a noun, *he* would act as the resumptive pronoun after these subjects as well, such that *me-fellow man he come* became *mipela (man) i kam*.
- (2) why the dual and trial forms of *yumi* require the predicate marker. These are derived from an earlier *yumi tupela man* 'we two men' and *yumi tripela man* 'we three men' with a noun followed by the resumptive pronoun, reflected today by *i*.
- (3) the use of the plural marker as the third person pronoun as a result of the same pattern (1988a:130). Starting with *ol man i kam* 'the men came' (< *all man he come*), where *ol* occurs in the same quantifier slot as *tupela* or *tripela*, loss of the nominal head would produce *ol i kam* 'they came'. Given the validity of this analysis, it would suggest that the plural usage of *ol* preceded the pronominal usage. This fits with the superstrate source *all*, in which *all men* could easily be interpreted as [pl man]. It is easy to see how *all* in a sentence such as *all men came* can be converted to a pronoun, as in *all came*, whereas the converse development beginning with *all came* and leading to *all men came* is intuitively less appealing.<sup>6</sup>

The presence of competing forms for the third person plural pronoun, such as *hipela* and *empela* argues further for Keesing's analysis. In these cases, the extension of the use of *-pela* as a pluraliser to the singular pronominal forms such as *he* and *him* follows the same lines as the creation of *mipela* and *yupela* from *mi* and *yu*. It would appear that this regularisation of the paradigm was in competition with the extension of the plural marker, but ultimately lost out. In his discussion of Pijin *olgeta*, Keesing notes:

But “him-fellow” did not in the end become established as the third-person plural form. It was outcompeted, for reasons and through processes we can only speculate about, by the pronoun derived from English “altogether” (Melanesian *olgeta*)...However, the third-person nonsingular pronouns in Melanesian Pidgin dialects have been, and for some continue to be, unstable. (1988a:139)

The instability found in the third person non-singular pronouns is also found elsewhere in the Tok Pisin pronominal system, especially in the use or non-use of the subject referencing pronoun *i*. The system described above for Tok Pisin applies in large part to Pijin and Bislama as well, but dialects of each Bislamic language show variation from the ‘standard’ form I have presented. I have mentioned several differences for Tok Pisin, such as the use/non-use of *i* after *mipela* and *yupela*, and the use of *i* instead of *mi*, *yu* and *yumi* as subject referencing pronouns. Charpentier (1979b:311) notes variation in the Bislama system, and in certain instances variants in Tok Pisin and/or Bislama are reflected in Pijin, for example the non-use of *i* after *mifala*. Both Charpentier and Keesing see this variation as largely based on similar differences in substrate languages: ‘the data on Solomons Pidgin...strongly suggest that variant analyses reflected variant patterns in the substrate languages’ (Keesing 1988a:166). In Papua New Guinea, the MNAN-like use of focal versus subject referencing pronouns is most evident in New Britain and other areas where MNAN languages are widespread, and less so in the speech of people from largely NAN language-speaking areas.

Although the majority of MNAN languages share the focal/subject pronoun distinction, variation can be found in the degree to which subject referencing pronouns differ from the focal pronouns. In many they are distinct, but in others the subject referencing pronouns do not make all the distinctions of the focal pronouns, from the absence of dual/trial distinctions, as in Lusi, to the use of generalised subject referencing pronouns as found in Maewo and Mota (Keesing 1988a:82), in which most persons are not distinguished. Not coincidentally, this appears to be the area in which Bislamic languages show variation. Nonetheless, such substrate influence does not prevent mutual intelligibility. Ultimately, the system as described for Tok Pisin falls somewhere between the more complex systems (e.g. Kwaio) and the simpler ones (e.g. Mota), and captures the essence of MNAN subject referencing.

### 7.3 TRANSITIVITY

#### 7.3.1 TRANSITIVITY IN TOK PISIN

The Tok Pisin productive transitive suffix *-im* (subject to vowel harmony rules in Pijin and Bislama) indicates that the verb is accompanied by an object noun or pronoun. Most transitive verbs in Tok Pisin require the suffix, with a few exceptions such as *gat* ‘have’ (but PIJIN *gar-em*) and *save* ‘know’ (see Laycock 1970:xxi). A large class of verbs can be either transitive (with *-im*) or intransitive (without *-im*).

*mani bilong mi i lus*  
 money poss 1s sr lost  
 my money is lost



*mi lus-im mani bilong mi*  
 1s lose-tr money poss 1s  
 I lost my money

A second type of transitive marking also occurs, in which the verb is followed by the preposition *long* and an oblique object. Some verbs show intransitive, transitive and remote transitive forms:

<i>pret</i>	afraid	<i>pretim</i>	frighten	<i>pret long</i>	afraid of
<i>lukluk</i>	look	<i>lukim</i>	see	<i>lukluk long</i>	watch (for)
<i>lukaut</i>	beware	<i>lukautim</i>	watch over	<i>lukaut long</i>	beware of

Bislama has the same system:

<i>fraet</i>	afraid	<i>fraetem</i>	frighten	<i>fraet long</i>	afraid of
<i>lukluk</i>	look	<i>lukum</i>	see	<i>lukluk long</i>	watch
<i>lukaot</i>	beware	<i>lukaotem</i>	look for	<i>lukaot long</i>	look after

The third person singular pronoun *em* does not normally occur after a transitive verb; absence of a pronominal object or an nominal object implies a third person object:

*em i luk-im mi*  
 3s sr see-tr 1s  
 he saw me

*em i luk-im muruk*  
 3s sr see-tr cassowary  
 he saw a cassowary

*em i luk-im*  
 3s sr see-tr  
 he saw him/her/it/them

*em* may occur after a transitive verb for contrast, emphasis, focus or switch reference:

*meri i kros-im pikinini na i pait-im*  
 woman sr angry-tr child and sr hit-tr  
 the woman scolded the child and hit it

*meri i kros-im pikinini long wanem i pait-im em*  
 woman sr angry-tr child caus what sr hit-tr 3s  
 the woman scolded the child because it hit her

### 7.3.2 TRANSITIVE SUFFIXES IN MNAN

Most MNAN languages also possess transitive suffixes, although the productivity of the transitive suffix varies from language to language. Southern Vanuatu and parts of Papua New Guinea tend to lack a transitive suffix except as a residual (morphologically conditioned) phenomenon. The northern Vanuatu and Solomon Islands languages, on the other hand, often have highly productive transitive suffixes. Among the languages in the sample which lack a transitive suffix are Big Nambas, Nakanai

and Balawaia. Most verbs in the languages of southern Vanuatu (Lenakel, Tanna, Nguna, Paamese, Ambrym) lack a productive transitive suffix, but a residual suffix limited to a few verbs can be found in these languages (see Appendix XVI). Ambrym has a number of transitives which take the suffixes *-ne*, *-he* and *-te* (Paton 1971:60). Lusi has no transitive suffix and has a zero morpheme for third person singular objects; in a few verbs, however, a residual suffix *-ni*<sup>7</sup> occurs.

LUSI	<i>ŋa-mura-ni</i>	<i>le-mu</i>	<i>uzage</i>
	1s-hide-tr	poss-2s	knife
TP	<i>mi hait-im</i>	<i>naip</i>	<i>bilang yu</i>
	1s	hide-tr	knife poss 2s
	I hid your knife		

A number of MNAN languages have relatively productive transitive suffixes. For example, Sie has a transitive suffix *-(o)ŋi* found on a number of transitive verbs:

SIE	<i>y-amtit-oŋi</i>	<i>Lui</i>	
	3s-r:fear-tr	Lui	(Lynch 1983:32)
TP	<i>em i pret</i>	<i>long Lui</i>	
	3s	sr afraid caus	Lui
	he was frightened of Lui		

The most common form of transitive marking is the use of a suffix *-i*, preceded by a consonant that is morphologically conditioned ( $\emptyset$  is a possible allomorph of this consonant). Pawley (1973) has reconstructed this same form for POC, and it is likely to have been the source of the transitive suffixes discussed above in Nguna, Paamese and Ambrym. Among the languages that possess such a suffix are Tangoan, Mota, the languages of the Solomon Islands and Manam. In Kwaio, these suffixes are not obligatory, but their presence 'heightens or strengthens transitivity in some way' (Keesing 1975:xxi). In Mota, the vowel *-i* has been lost but the consonant remains. In addition, many of these languages have a 'remote' transitive suffix which Pawley (1972, 1973) has reconstructed as *\*-Caki(ni)* for PEO and POC. The use of this second transitive marker is not entirely clear, but it tends to mark secondary case roles of the object, such as instrument, cause and beneficiary. Examples are provided in Appendix XVI.

In a third group of languages, there is no specific transitive suffix, but transitive verbs require an object pronoun suffix. In the case of nominal objects, the third person suffixes are required. In other words, the object is indexed on the verb; it is occasionally called an 'anticipatory object' (cf. Ivens 1935a:153). In Big Nambas, this indexing does not appear to be obligatory; Fox's (1979) grammar contains sentences where the third person object suffix *-i* anticipates a nominal object, and others where the suffix is absent. In Sie and Port Sandwich, the transitive suffix *-i* is the same in form as the third person object suffix, but is used before all object pronouns. The third person suffix *-a* in Nakanai does not occur with patient nouns that represent new information. Some of the languages which possess a transitive suffix also index the third person object on the verb.

Although the above discussion represents a simplification of the complexity that actually exists in the MNAN languages, it shows clearly that very few MNAN languages are not familiar with suffixes which distinguish transitive verbs from intransitive verbs. Three major categories present

themselves: (1) a distinctive transitive suffix, either residual or productive; (2) a 'remote' transitive suffix; and (3) the indexing of the the third person object suffixes on the verb. Moreover, these three phenomena are not necessarily independent, but may co-exist in a given language.

TABLE 14: TRANSITIVE MARKING IN MNAN LANGUAGES

	TRANSITIVE	REMOTE	INDEXING
LENA	- <i>ín</i>	-	-
TANN	- <i>kin</i>	-	-
SIE	- <i>opi</i>	-	- <i>i</i>
NGUN	- <i>Ci</i>	-	-
PAAM	- <i>Ci</i>	-	- <i>n</i> , - <i>e</i>
AMBR	- <i>Cε</i>	-	-
PORT	- <i>i</i>	- <i>ini</i>	-
NAMB	-	-	(- <i>i</i> )
TANG	- <i>Ci</i>	-	(- <i>a</i> )
MOTA	- <i>C</i>	- <i>Cag</i>	-
AROS	- <i>Ci-</i>	- <i>Ca?ini</i>	- <i>a</i>
SA'A	- <i>Ci</i>	- <i>Ca?ini</i>	- <i>e</i>
KWAI	- <i>Ci</i>	- <i>Ce?eni</i>	- <i>a</i>
LONG	- <i>Ci</i>	- <i>Caini</i>	- <i>a</i>
VATU	- <i>Ci</i>	- <i>Cahini</i>	- <i>a</i>
NGGE	- <i>Ci</i>	- <i>Cagi(ni)</i>	- <i>a</i>
BUGO	- <i>Ci</i>	- <i>Cagi(ni)</i>	- <i>a</i>
TIGA	-	- <i>an-i</i>	- <i>i</i>
TOLA	- <i>e</i>	- <i>ane</i>	-
NAKA	-	-	(- <i>a</i> )
LUSI	- <i>ni</i>	-	-
MANA	- <i>C-</i>	- <i>Ca?-</i>	- <i>i</i>
BALA	-	-	- <i>a</i>

Indexing intransitive verbs to distinguish them from transitive verbs is another way to mark grammatical roles within a sentence. In Tok Pisin, intransitive verbs are usually unmarked, but there is a restricted set of reduplicated intransitive verbs which contrast with the related transitive verbs:

<i>lukluk</i>	watch, look at	<i>lukim</i>	see
<i>waswas</i>	wash, bathe	<i>wasim</i>	wash
<i>toktok</i>	speak, talk	<i>tokim</i>	tell, say to
<i>singsing</i>	sing, dance	<i>singim</i>	sing (a song)
<i>tingting</i>	think, ponder	<i>tingim</i>	remember, think of

Bislama shares a number of these intransitive forms, such as *lukluk*, *toktok* and *singsing*.

Reduplication occurs in some MNAN languages with this function. In Port Sandwich, Big Nambas and Nakanai, these reduplicated forms also mark durative aspect. Tolai has two types of

reduplication, one for durative aspect and the other for marking intransitive verbs. (Durative intransitives are reduplicated twice.)

PORT	<i>ɲas-i</i> <i>voc-i</i>	chew sthg hit with the hand	<i>ɲas=ɲas</i> <i>voc=voc</i>	chew, masticate applaud (Charpentier 1979a:145)
NAMB	<i>sip'len</i> <i>rp</i>	make fun of hit	<i>sip'=sip'l</i> <i>rpa=rp</i>	continually scoff always be hitting out (Fox 1979:70-71)
TANG	<i>xani</i> <i>reve</i>	eat pull	<i>xani=xan</i> <i>reve=reve</i>	eat pull, fish by line (Camden 1979:90)
TIGA	<i>nol-i</i> <i>vis-i</i>	think hit	<i>no=noli</i> <i>vis=vis</i>	think fight (Beaumont 1979:92)
TOLA	<i>punang</i> <i>kul</i>	bury buy	<i>pu=punang</i> <i>ku=kul</i>	bury shop (Mosel 1980:101)
NAKA	<i>hugu</i>	carry on the head	<i>hugu=gu</i>	be carrying on the head (Johnston 1980:155)

### 7.3.3 DISCUSSION

The transitive suffix entered MPE early on, as it occurs in all three Bislamic languages and is also found in other Pacific lingue franche such as CPE and Australian Aboriginal creoles. This suggests that it was brought to the Pacific in a manner similar to the importation of *bilong*, that is, by seamen who regularly used it as part of their maritime lingua franca:

The form “-him” suffixed to verbs was undoubtedly brought to the Pacific as part of the European repertoire for “talking to natives”. Clark (1979:16) notes its occurrence (as “um”) in American Indian English and apparently in early Nigerian Pidgin. It seems to have been used in the Pacific early in the nineteenth century, judging by Dana's fragments from Hawaiians in San Diego and by fragments from the Aboriginal Australian pidgin at the beginning of the century. (Keesing 1988a:119)

The presence of comparable transitive suffixes in MNAN languages assured that it was not only adopted into MPE, but developed into a very productive suffix, one of the few actual affixes to be found in the Bislamic languages:

The form “um” or “him” used by Europeans as part of their repertoire of “Kanakan talk” was sporadic and unsystematic, and probably had no fixed syntactic function. A careful look at its use in twentieth-century Melanesian Pidgin dialects and at the textual records of the nineteenth century...reveals the way in which speakers of Oceanic languages analyzed

this form as equivalent to the transitive suffixes in their own languages, suffixes derived from POC *\*-i*. In this process, Oceanic speakers generalized and standardized the form manifest by the mid-1840s (Fiji: "Me like um man") into an obligatory transitive suffix. (Keesing 1988a:119-20)

The derivation of a transitive suffix from English *him* satisfies two MNAN structures: the distinctive transitive suffix of some MNAN languages and the use of the object-indexing structure of other MNAN languages. Whether the Melanesians had made the semantic connection between object indexing and the use of an English third person object pronoun as a transitive suffix at the partial learning stage is debatable. Nonetheless, in their modern forms at least, there is some similarity between the Tok Pisin suffix *-im* (PIJN *-im ~ -em*, BISL *-im ~ -em ~ -um*) and the Tok Pisin focal pronoun *em* (PIJN and BISL *hem*), so that it is entirely possible that the connection was (and still is) evident. If this is the case, then *-im* acts both as a transitive suffix and as an anticipatory third person singular object.

Mühlhäusler suggests that the 'first morphological causatives ending in *-im*' (1983a:475) in Tok Pisin are found around 1910. By 'morphological causative' is meant the derivation of a transitive verb from an intransitive (stative, adjective or process) verb. MNAN languages generally possess a causative prefix distinct from the transitive suffix (usually a reflex of POC *\*paka-*, as with Lusi *pa-*), but *-im* began to fulfil the same role in Tok Pisin. In its earlier stages, causatives were formed by the use of *mekim* 'do', 'make', a structure also used to a limited degree in some MNAN languages (e.g. Tangoan, Tigak, Lusi). This construction is still used, but it is currently in competition with the use of *-im* in both Tok Pisin and Bislama:

TP	<i>em i mek-im divai i pundaun</i>	
	3s sr make-tr tree sr fall	
=	<i>em i mek-im pundaun-im divai</i>	
	3s sr make-tr fall-tr tree	
=	<i>em i pundaun-im divai</i>	
	3s sr fall-tr tree	
	he felled the tree	
BISL	<i>i mek-em hem i draon</i>	
	sr make-tr 3s sr submerge	
=	<i>i draon-em hem</i>	
	sr submerge-tr 3s	(Camden 1979:91)
	he submerged it	
TANG	<i>mo v'ai-a mo pute</i>	
	3s:r make-tr 3s:r submerge	
=	<i>mo pute-xi-a</i>	
	3s:r submerge-tr-3s	(Camden 1979:91)
	he submerged it	

LUSI     *ŋa-kazo kekerei i-zio            ga i-lati pa-go*  
           1s-make sand        3s-go down and 3s-go loc-2s  
           I knocked dirt down on you

Keesing challenges Mühlhäusler's (1980b) account of the late development of causatives in Tok Pisin, saying that 'the grammar of pidgin had reached considerable complexity more than ten years earlier than Mühlhäusler surmises' (1988a:124ff); nor is this a specific Tok Pisin development, since it is also found in Bislama and Pijin. The English etymon 'him' was adopted into MPE by Melanesians to fulfill the role played by transitive suffixes in their native languages, while *mekim* came into use as a causative modelled on English (which uses a similar structure) and on a few MNAN languages (which also use the verbal equivalent to *make*) or on the MNAN use of a causative prefix:

The pattern of forming periphrastic causatives with *mek-em* would seem to represent a natural generalization from, on the one hand, the use of *mek-em* as an all-purpose transitive verb expressing agency – 'do, create, make, bring into being'; and, on the other, the English pattern where "make it X" expresses causative meanings of the Oceanic variety...

In the pidgin spoken in Vanuatu, the Solomons, and seaboard Papua New Guinea by older Austronesian speakers who learned the lingua franca in plantation contexts, the causative pattern is realized as a periphrastic *mek-em strong* 'strengthen it', *mek-em iumi stap* 'cause us to stay', and so on. However, in some of these communities a pattern more like the Oceanic model has occasionally surfaced: *mek-strong* + NP or *mek-strong-im* + NP or *mek-im strong*. (Keesing 1988a:125)

The *make it V* construction may also have been perceived as an equivalent to the MNAN causative prefixes because it is preverbal. In time, the transitive suffix came to compete with the causative in this function, collapsing the distinction made by most MNAN languages between causative and transitive affixes. In Tok Pisin, the use of *mekim* in a contracted, prefixed form *mek-* has mostly fossilised in a few lexical items, such as *mekpas* 'a bundle', *meknais* 'move', *meknois* 'make noise', and in some dialects *meksave(im)* 'teach someone a lesson', 'punish'. That Bislama shares the word *meknoes* 'make a noise' demonstrates the early origin of the process.

The contracted forms with *mek-*, however, present a number of irregularities: (1) the form *mekpas* is a noun while *meknais*, *maknois* and *meksave(im)* are verbs; (2) *meknais*, *meknois* and *meksave(im)* also occur as *mekim nais*, *mekim nois* and *mekim save*; and (3) the transitive verbs *meksave(im)* and *mekpasim* are evidently subject to regional variation, since neither is widely used in north-western New Britain where constructions using *mekim* are preferred, and since neither is found in Mihalic's (1971) dictionary. The irregular nature of these contracted forms relative to the regular derivation of transitive verbs with *-im* and the fact that they are *intransitive* verbs and not transitive causatives (with the exceptions of the derived forms *meksave-im* and *mekpas-im*) suggest that the function of *mek-* was never firmly established in Tok Pisin. Furthermore, the use of *mek-* as a causative prefix comparable to that of MNAN or other Oceanic languages never became productive (although causative constructions using *mekim* + V/adj are not unusual).

In MNAN languages, as in the Bislamic languages, the causative prefix is in competition with transitive marking. That is, languages do not always agree on which forms take the causative prefix, which forms take the transitive suffix and which take both. Keesing (1988a:126) discusses how the two processes are used in Pijin to reflect a semantic contrast in Kwaio, but it is clear that such calquing could lead to problems where substrate languages differ in which process is used to mark which semantic role relationship. Given that MPE was developing as a lingua franca which all could use and understand, competing forms at this stage were problematic, and the most straightforward solution was to maintain simplicity by developing one inflection and sacrificing another. The transitive suffix, used also by English speakers in a 'foreigner-talk' register, appears to have entered Pacific pidgin more firmly, while the causative prefix *mek-* appears to have come later, based on calquing; it required the reduction of the periphrastic construction *mekim* + V (that this construction already contains *-im* shows its earlier presence). These conflicts ultimately gave preference to the regular and simple derivation of transitive verbs from intransitive verbs or adjectives with the suffix *-im*, and as the process increased in productivity, so the causative prefix increasingly lost ground. Although substrate languages have comparable structures, the transfer of a causative prefix to MPE was constrained.

Another failed development in MPE is the use of reduplication to distinguish intransitives from transitives. Although its presence in Tok Pisin is comparable to the Tolai use (but not distribution) of reduplication, its presence in Bislama suggests it entered MPE before Tolai was available as a substrate language. Mosel (1980:54) argues against attributing this pattern to Tolai, because the Tok Pisin use of reduplication is much less productive than it is in Tolai, and because the Tok Pisin verbs that use reduplication do not have reduplicated counterparts in Tolai (with the exception of *gire* and *gigira* 'see, look at, look' – TP *lukim* and *lukluk*).

If reduplication of intransitives did not occur in MPE, then its presence in both Bislama and Tok Pisin is the result of independent development. This is possible, but unlikely, since Bislama and Tok Pisin reduplicate the same verbs, a very limited set. The reduplication must therefore have occurred during the formation of MPE, and a possible explanation is that the pattern (but not the choice of verbs) was derived from substrate languages, since there are several MNAN languages in both Vanuatu and Papua New Guinea which use this device to mark intransitivity. Nonetheless, it did not become a productive device, attributable perhaps to the varied uses of reduplication in MNAN languages (see section 6.3.3) and to the fact that only a minority of MNAN languages use reduplication as a marker of intransitivity. Reduplication has been more widely accepted to mark durative or iterative aspect, which is a more iconic function than marking intransitivity. As a calquing experiment on the plantations, reduplication to derive intransitive verbs failed to become productive. In fact, the evolution of a productive transitive suffix *-im* makes an intransitive marking redundant. Majority rule, iconicity and simplicity constrained the spread of reduplication in this function, but the existence of a handful of reduplicated intransitive verbs bears witness to the process of trial and error.

## 7.4 SERIAL VERBS

## 7.4.1 SERIAL VERBS IN TOK PISIN AND MNAN

Tok Pisin has a construction in which verbs of motion such as *go* 'go' and *kam* 'come' are used as directive co-verbs following the main verb, and comparable constructions are also found in Pijin and Bislama. *go* is used to denote movement away from the speaker and *kam* to denote motion towards the speaker. In this construction, the predicate subject pronouns *mi*, *yu* and *yumi* are usually replaced by *i* before the directive verbs, such that the resultant verb phrase has the structure: *V i go/kam* (the locative verb *stap* can also be used in the *go/kam* slot, and indicates the place where something has come to rest, or within which a motion occurs):

*mi kis-im i go long haus*  
 1s take-tr sr go loc house  
 I took it to the house

*yu kar-im pikinini i kam*  
 2s carry-tr child sr come  
 bring the child

Serial verbs are very common in MNAN languages, many of which use a construction similar to that used by Tok Pisin:

LUSI *ga-sere gaea i-la*  
 1s-remove pig 3s-go

TP *mi raus-im pik i go*  
 1s remove-tr pig sr go  
 I got the pig out of here

LUSI *ti-lalao ga ti-la Atiatu*  
 3p-walk and 3p-go Atiatu

TP *ol i wokabaut i go Atiatu*  
 3p sr walk sr go Atiatu  
 they walked to Atiatu

While serialisation is commonly found in the sample MNAN languages, compound verbs are found in Big Nambas, and Nakanai uses a prefix. Some languages have distinct directive morphemes for this purpose. In Kwaio, Arosi and Manam, the POC verb *\*maRi* 'come', for example, has become a directive morpheme 'hither', suggesting that such directive morphemes may have been serial verbs historically. Appendix XVII provides examples of serial verb constructions found in the sample MNAN languages.

## 7.4.2 DISCUSSION

The development of serial verb constructions in Tok Pisin represents a very different syntactic solution to the problem of marking semantic relationships among sentence elements than is found in English, where directives and other semantic roles are indicated by a wide range of post-verbal



particles and prepositional phrases. Although certain particles such as *ap* < *up* and *aut* < *out* entered MPE, they appear as fossilised suffixes and are not usually separable from the verb stem, e.g. *kamap* 'arrive', 'appear', 'occur' (from 'come up') and its transitive counterpart *kamap-im* 'bring into existence'.

Very few prepositions entered MPE, and the prepositional repertoires of the modern Bislamic languages vary in number and scope. Three are shared by all three languages: *long*, *b(i)long* and *olsem*. In addition, Pijin and Bislama share *from*, but only Pijin has *fo* (< *for*). That this last is only found in Pijin is somewhat curious, given the widespread distribution of *fo* in English-based pidgins and creoles worldwide. *long*, which comes from English *along*, is used to mark oblique cases (particularly locative and instrumental semantic roles) and 'remote' transitivity, and in complex prepositional constructions such as *antap long* 'on' or *klostu long* 'near', in which the first element is a noun or an adverb; compare *antap bilongen* 'its top' or *em i kalap i go antap* [3s sr climb sr go up] 'he climbed up/to the top' (cf. Crowley 1988:7 on comparable Bislama phrases). *olsem* (from *all (the) same*) translates as 'like', as in *em i wokabaut olsem pikinini* [3s sr walk like child] 'he walks like a child'. *olsem* also has adverbial functions comparable to English *thus* or *in this/that manner*. The last, *b(i)long*, was discussed in sections 5.3, 5.4 and 5.6. In addition, both Bislama and Pijin possess a number of 'prepositional verbs' which do not occur in Tok Pisin, although one prepositional verb of Bislama and Pijin, *wet-em* 'with' (from *with* + transitive suffix) has a prepositional counterpart in Tok Pisin *wantaim* (from *one-time*). Keesing (1988a:181ff) and Crowley (1988) discuss the relationship of these prepositional verbs to comparable structures in Solomon Islands and Vanuatu languages, members of the Eastern Oceanic subgrouping.

The relative dearth of prepositions in MPE is a result of the partial learning stage, during which few function words such as prepositions were acquired. Since MNAN languages differ regarding the number of prepositions they possess and the semantic range of these prepositions, the adoption of prepositions into MPE may have been constrained. Many MNAN languages also possess few prepositions (Lusi, for example, has two prepositions, one postposition and a locative suffix). The end result is that neither particles nor prepositional phrases were available for use as directives as is the case in English.

On the other hand, verbs of motion were available for this function. Not only are they semantically transparent, but their use corresponds to similar constructions in many MNAN languages. Even those speakers of languages which possess specific directive morphemes can calque their native structures by using these verbs of motion. This situation resulted in a MPE construction which relates closely to MNAN languages; Keesing (1988a:33) notes the presence of serial constructions relatively early in the history of Pacific pidgins.

## CHAPTER 8

### CONCLUSIONS

In their comparisons of Bislama with certain MNAN languages of Vanuatu, Charpentier (1979b:273ff) and Camden (1979:55ff) demonstrate that a high degree of lexical semantic convergence has occurred. The data presented in this study and in the work of Crowley (1987b, 1988), Simons (1985) and Keesing (1988a) show that the study of this semantic convergence can be extended both geographically – the same convergence often reflects the MNAN languages of the Solomon Islands and of Papua New Guinea, as well as Pijin and Tok Pisin – and linguistically – convergence between Bislamic languages and MNAN languages goes beyond the semantics of lexical items such as nouns and verbs to include morphemes used to mark syntactic and semantic relationships among constituents at both phrase and sentence level.

In this study, I have examined the Tok Pisin morphemes *ol*, *bilong*, *stap*, *go*, *save*, *pinis*, *(baim)bai*, *i*, *-im* and constructions involving juxtaposition of nouns, reduplication, repetition of verbs, and serial verbs, with occasional reference to the Pijin or Bislama equivalents. The list of similarities between these Bislamic languages and MNAN languages could be greatly extended, given a better body of comparative data. What is noteworthy in such a study is that the semantic content of these lexical items has diverged from the semantic content of their English etyma.

TABLE 15: COMPARISON OF ENGLISH ETYMA AND TOK PISIN DERIVATIONS

ENGLISH ETYMON	ENGLISH MEANING	TOK PISIN REFLEX	TOK PISIN MEANING	COMPARABLE ENGLISH FORM
<i>all</i>	totality	<i>ol</i>	pl	{Z}
<i>belong</i>	be the property of	<i>bilong</i>	poss	{Z}
<i>stop</i>	be at/come to rest	<i>stap</i>	prog	be V-ing
<i>go</i>	move towards	<i>go</i>	dur	keep V-ing
<i>finish</i>	bring to an end	<i>pinis</i>	comp	have V-en
<i>by and by</i>	shortly, before long	<i>(baim)bai</i>	irr	-
<i>he</i>	3sg subject pronoun	<i>i</i>	sr	-
<i>him</i>	3sg object pronoun	<i>-im</i>	tr	-

The last column of Table 15 shows that the English translations of the Tok Pisin reflexes differ considerably from the English etyma of those reflexes. The closest English translations of Tok Pisin syntactic forms require inflectional morphemes (such as {Z}), the morpheme representing the

numerous allomorphs of the English plural suffix) or syntactic structures such as 'keep V-ing'. In some cases, there is no English parallel. The development of MPE and the modern Bislamic languages involved the grammaticalisation of English etyma in an attempt to imitate MNAN structures and their semantic content as closely as possible in the sociohistorical circumstances that pertained during their history.

Although other authors have examined the connection between Bislamic languages and MNAN languages, their comparisons have usually involved a single MNAN language (or a group of closely related languages) and have tended to focus on structural identity. This study broadens the scope by showing that it is possible (and important) to include MNAN languages from the entire Melanesian region (or, as Keesing suggests, an even larger Oceanic region) as an areal substratum. Furthermore, the study shows that a formal comparison misses an important connection between MNAN languages and the Bislamic languages. Any comparison between a given Bislamic language and a given MNAN language will find differences: (1) regarding the specific lexical items involved, such as which transitive verbs take transitive suffixes; (2) as to whether the semantic relationship to be marked is optional or obligatory, such as the use of plural marking involving human or non-human entities; and (3) in the range of distinctions that can be made, such as the differentiation between progressive, durative and habitual. The important point is that the syntactic structures used in Tok Pisin and its sister languages ultimately reflect a shared MNAN syntax, and that the semantic content of these languages overlaps in focal areas of meaning.

While English is also capable of marking most of these syntactic and semantic relationships, three points argue for the MNAN sources: (1) those marked in Tok Pisin are those found in MNAN languages, but many features of English semantics (e.g. tense) are absent in both Tok Pisin and MNAN; (2) certain features in Tok Pisin are unknown in English (e.g. subject referencing, transitive marking) but are found in MNAN; and (3) where both English and MNAN mark the same semantic relationships, the structure in Tok Pisin is more similar to MNAN than it is to English (e.g. the structure of possessives).

MNAN languages are quite diverse in their surface syntax, but nonetheless many do use the same structures, and it is these widespread agreements that found their way into Tok Pisin. Thus the completive aspect marker *pinis* is post-verbal, as it is in the majority of MNAN languages. The English perfective aspect ('have' plus past participle) was not adopted, and although a construction of the sort 'he finished dying' may occur in English, its structure and meaning differ considerably from the Tok Pisin construction *i dai pinis* 'he is dead'. Similarly, Tok Pisin has *pikinini man* and not \**man pikinini*, based on MNAN order and not on English 'male child' or even 'man child'.

This is not to deny the influence of English on the shape of the pidgin that ultimately became the Bislamic languages; the placement of adjectives before nouns, for instance, can be attributed to English word order and not MNAN languages, where the preferred order is *noun + adjective*. In other areas, similarities between English and MNAN languages undoubtedly influenced the direction taken by the lingua franca, such as SVO word order. As Keesing suggests, however, such word order need not be attributed to either superstratum or substratum, since:

...the SVO [order] has a universal motivation, as a kind of basic unmarked order...SVO seems to be a kind of default order, which requires minimal marking of the arguments of a predicate, creates minimum ambiguity, and entails the most direct connection between underlying order and surface sequence. (1988a:131)

A similar argument was made in section 3.5 and, as Keesing states, 'what matters is surely that, for parties on all sides of these encounters, a common order of constituents required very little negotiation' (1988a:131). When the same phenomenon can be explained by reference to the superstrate language, to the substrate languages or to language universals, there is no reason to give one explanation primacy over the others.

In yet other instances, variation in possible English structures provided places of congruence with MNAN languages, such as the use of a resumptive third person pronoun which developed into the generalised Bislamic subject referencing pronoun *i*. Given that communication between English speakers and Melanesians or among Melanesians themselves was the *raison d'être* of MPE, any structures which succeeded in getting the message across were potential resources for stabilisation. The success of communicative structures was ultimately guided by principles of semantic transparency, whether the interlocutors were matching substrate language structures among themselves, finding common ground between substrate languages and English, or creating innovative structures.

The development of Tok Pisin from its beginnings in a Pacific pidgin to its present use as an expressive language of national importance is a complex phenomenon that can never be fully described. The participants in the original contact settings are not available for comment; most of the people involved even in the last years of the Labour Trade are gone forever. The social situations which led to the genesis of these languages and influenced their development through time are numerous and equally inaccessible. Reconstruction of the genesis and ontogeny of Tok Pisin must therefore be adduced from analyses of synchronic and diachronic data. These reconstructions lead ultimately to hypotheses and theories which may change over time as new data emerge and new ideas are brought to bear on these data.

To explain pidginisation and creolisation, the most popular theories have revolved around the role of simplification processes (focusing on the target language), substratum influence (focusing on substrate languages), independent development (focusing on the pidgin) and language universals (focusing on all languages). Although this study focuses on the influence of MNAN languages in the development of Tok Pisin, the claim is not made that substratum influence alone can account for the form of the modern languages. Nor is it even a question of which explanation (simplification, substratum influence, innovation or universals) has most weight, because these processes are intricately bound at all stages of development. Certainly, MNAN languages played an important role in directing the outcome, but, in the absence of all other factors, substratum theory alone cannot explain the structure of these languages; independently, it has no weight.

In this study I suggest that the genesis of MPE and its development into modern Tok Pisin are the result of the interaction of partial learning, substratum influence and the evolution of productive syntactic markers. In each case, cognitive solutions to communication problems (such as semantic transparency) guided the selection of lexical items, their use within syntactic constructions, the sorts

of structures used and how they developed. Initially, the learning of English involved the acquisition of content words to the exclusion of many syntactically important function words. At first, it is likely that these content words were strung together without functors in simple communicative acts. As the communicative usefulness of a lingua franca grew, the content words learned during the initial period were called upon to mark relationships among words in larger phrases and core complex sentences, since English continued to be a foreign and exotic language to the majority of the learners. These content words came to take on the semantic content of grammatical morphemes shared by many of the MNAN languages involved. Once the lingua franca had established a repertoire of meaningful function words derived predominantly from English content words, these functors became increasingly productive and began to be used in unique ways, different from comparable functors in many MNAN languages. At the local level, however, substratum influence continued (and continues) to affect the lingua franca in minor and distinctive ways, leading to variation; subsequent standardisation and anglicisation, however, has eroded away many of the archaic forms and dialect differences which reflect the early stages of language development. Ultimately MPE developed into an expressive language with a grammar distinct in many aspects from its MNAN and English progenitors. The modern descendants of MPE are well-suited, as a result of their semantic origins, to expressing Melanesian thought and describing Melanesian culture.

Throughout this study, reference is frequently made to the role of sociohistorical factors interacting with linguistic factors. It is the conjunction of such factors throughout time that caused the initial Pacific pidgin(s) to become Tok Pisin or Bislama or Pijin as they are now known. The result of these particular conjunctions also led to a 'pidgin of another feather', in that the modern Bislamic languages share features among themselves that are not found in other pidgins and creoles. At the same time, certain combinations of factors may explain the ways in which the Bislamic languages came to share a number of features with other pidgins and creoles. Among such sociohistorical factors are: (1) the attitude of the Europeans and the Melanesians to each other throughout time; (2) the sequence of events that led initially to contact and then to the plantation systems; (3) the movement of contact through Melanesia; and (4) the evolution, as a result of European expansionism, of autonomous Melanesian societies into national entities. These sociohistorical factors influenced such linguistic factors as: (1) the initial linguistic input from which Melanesians attempted to learn English; (2) the linguistic input of MNAN speakers; and (3) the linguistic input of Europeans.

When Europeans began to show a serious interest in Melanesia, most came with preconceived notions of how to communicate with foreigners. In part this relates to the cultural milieu at that time, which encouraged Europeans to believe that the 'savages' inhabiting non-European lands were morally, culturally and mentally inferior. Such 'savages', therefore, had to be addressed in simple language. In addition, historical circumstances led to a polyglot contact situation. MNAN languages were many and diverse, and the intruders themselves spoke many languages, as the crews of Pacific ships were composed of Europeans, Asians, Pacific islanders, etc. Over time the composition of the ship crews may have changed, but it continued to show linguistic diversity. Consequently, not all the newcomers were native speakers of English, and their English in itself was less developed than the native version. The linguistic input provided for the Melanesians, therefore, often represented a non-native English, with features typical of foreigner talk, as described by Ferguson and DeBose (1977), in particular the loss of inflectional and derivational devices and a reduced lexicon. This has led to the

investigation of 'universals' of simplification and pidginisation, but these widespread characteristics of pidgins are attributable in part to sociohistorical factors, such as the ability of native speakers to simplify their speech based on past experience, and the presence of non-native speakers in the contacting group.

Alleyne argues against simplification as a factor in the development of Afro-American languages:

...the earliest form of these dialects cannot plausibly be shown to be a simplification of English by Englishmen. The phonological system of the probable proto-form makes distinctions that are unknown in English and in fact cannot satisfactorily be explained by the phonological system of the English language of any historical period or regional dialectal variety. The English plural inflection is fossilized in the phonetic shape of morphs: *ekisi* 'egg', *yesi* 'ear', etc. and the most complicated features of the English verbal morphology (suppletion and internal change) are also fossilized: e.g., *boroko* 'to break', etymologically 'broke'; *lasi* 'to lose', etymologically 'lost'. (1980:126)

Although fossilised plurals also occur in Tok Pisin, and fossilisations of non-finite forms of the English verb are found (e.g. TP *bruk* 'be broken', *brukim* 'to break' but BISL *brok* 'be broken', *brekem* 'to break'), this does not argue against the simplification of English by native speakers. These forms are the exception that make the rule, and it should be noted that such exceptions can often be explained. The fossilised plurals, for example, are generally items that are found in numbers and not as single entities (e.g. *bis* 'beads' and *masis* 'matches') while the exceptional verb forms are statives. Even when producing foreigner talk, it is likely that native speakers are loath to use certain forms. As Mühlhäusler (1980a:39) notes, the speech of the Europeans was inconsistent regarding simplification. One cannot expect this process to be totally regular, and competing forms may have been quite common as the various jargons were brought together. The solution in the formation of a united lingua franca was to level competing forms to a single form (e.g. TP *bruk*) or to adopt both forms, ultimately with different functions (e.g. BISL *brok*, *brekem*). Furthermore, one cannot assume that all native speakers simplified to the same degree or that all learners learned the same amount of English. Variation in these areas allowed access to non-simplified forms. Alleyne's point ultimately is that simplification by the native speaker is not an autonomous explanation for the similarities to be found among pidgins and creoles around the world, a conclusion maintained here as well.

As their presence in Melanesia increased, Europeans continued to treat the Melanesians as culturally and mentally inferior, maintaining a social distance based on European class distinctions. This social distance was emphasised because Melanesians became the workers, while Europeans, no matter what their social status in European society, became the overseers. The Melanesians themselves also played a role in establishing such distance, since the Europeans often made poor guests by breaking Melanesian cultural rules and by their exploitation of Melanesian labour, land and resources. Consequently, some areas of Melanesia were excluded from contact after the Melanesians, through outbursts of violence, had made their opinion of intruders clear. Furthermore, the Melanesians have always outnumbered the Europeans. Such social distance and numerical inequality meant that English remained a relatively inaccessible language, limiting developments in the pidgin that could be derived from English. Although lexical items continued to flow into MPE, the

possibility of introducing new grammatical devices was constrained. Ironically, the social distance between Europeans and Melanesians prevented the learning of English, and the fact that Melanesians continued to speak pidginised English reinforced the Europeans' idea that the Melanesians were mentally inferior, incapable of speaking a 'pure' form of English.

Since English was largely inaccessible, MPE had to create the information conveyed by English or Melanesian affixes in some other way, and the means to do so was limited by the lexicon available at the time. Consequently, English lexical items came to be used in non-English ways, such as the use of 'all' in the guise *ol* as a plural marker. Presumably, given the same problems, speakers of pidgins in other places and at other times arrived at similar solutions (cf. Taylor 1971:294 regarding the use of the third person plural pronoun as a nominal pluraliser). That the resources for problem solving were limited, in turn constrained the outcome:

There is, however, no reason why the same linguistic form could not be explained historically by different factors in different areas: "substratum" influence in one case; other factors in other cases. "Substratum" influences always have to be substantiated *a fortiori*, of course, rather than merely asserted, and their validity weighed against other explanatory factors. But they cannot be automatically invalidated by the existence of similar forms elsewhere which are subject to other historical causal factors...Moreover, in many cases substrate languages have similar structures and strategies and thus produce similarities in contact situations in different parts of the globe. (Alleyne 1980:140).

Before their arrival in Melanesia, Europeans had experience with pidgins in Africa, North America and Asia, and undoubtedly many of the navigators, adventurers, entrepreneurs and missionaries who reached Melanesia were familiar to some degree with some form of pidginised English. As Keesing (1988a) suggests, the polyglot nature of the Pacific crews suggests that pidgin English was a tradition on ships before the Labour Trade had started. The proximity of China and its role in the trade triangle from Australia to Melanesia to China and back influenced the transportation of some CPE features to the Pacific. As a consequence, English-derived Pacific *lingue franche* such as MPE acquired certain lexical items found in other pidgins and creoles, such as 'savvy', found throughout the pidginised world, and 'belong', 'by and by' and others found in CPE (cf. Clark 1979, Baker 1987). The grammaticalisation of these and other English lexical items in Bislamic is thus attributable in part to their presence in other pidgins and creoles.

The grammaticalisation of English lexical items depended upon the need for a lingua franca that possessed better communicative devices than were available from the intergroup jargon used between Europeans and Pacific islanders. This need exploded when Melanesians were removed from their native language environment and put into direct contact on plantation settings with other Melanesians who spoke very different MNAN languages. Although bi- and multilingualism were prevalent among Melanesians, they had limited currency once recruitment for plantations headed increasingly north, arriving to swamp the linguistic scene in flow upon flow of new MNAN-speaking labourers. Melanesians may have had limited contact with their English-speaking overseers, but they had constant contact with each other. In such a setting, the ideas Melanesians wished to communicate soon required increasingly sophisticated linguistic structures. As a simple example, story-telling would require the marking of time sequence, switch reference case, etc., and it is not unimaginable

that story-telling was a common diversion in the evenings. Because of the limited means that resulted from inadequate linguistic input, the solution was placed in the hands of the Melanesians themselves. When faced with an idea difficult to express with the means available, the speaker would create a new form modelled on previous experience, namely, familiar vernacular languages. Calquing literally from a native language was possible in some cases (such as using *ol* as both a plural marker and a third person plural pronoun), but the lack of linguistic resources sometimes hampered literal calquing. This could be circumvented by using the lexical items at hand for new purposes modelled on native languages, and so *b(i)long*, for instance, was extended from a possessive morpheme to use as a purpose marker, modelled on possessive and connective morphemes in MNAN languages. Creative acts, however, could be constrained by the structure of MPE which had already been established. For instance, the placement of adjectives before the noun was introduced during the initial learning stage on an English model, and not the most widespread MNAN model of postnominal adjectives. On the other hand, the later development of aspect marking follows the majority of MNAN languages in putting *save* before the verb and *pinis* after it.

Certain English functors were adopted early on and were assured a permanent place in MPE as a result of their resemblance to features in MNAN languages. English uses 'him' as an object pronoun which follows the verb (e.g. 'I saw him' ), a feature corresponding to MNAN languages which have a transitive suffix in this slot or to MNAN languages which index object pronouns here. That this particular function word appears in CPE and North American pidgins probably accounts for its presence in the foreigner talk of the Pacific seamen and, just as importantly, for their acceptance of the form in the pidgin. Similarly, the use of 'he' as a subject reference pronoun *i* is a Melanesian interpretation, although the English lexeme had to be present at the onset for it to be adopted into MPE. Variant structures in the superstate (such as 'my father, he's a sailor') conflated English and MNAN usage and allowed English speakers to easily interpret the structure and use it in their own version of the pidgin.

The role of MPE as a lingua franca – and the continuing role of the Bislamic languages as such – imposed constraints on the amount of creativity possible without impeding communication, either among Melanesians or between Melanesians and English speakers. The lingua franca also had to possess the feature of easy learnability. When newcomers arrived on the plantations and when the lingua franca spread through Melanesia, it had to be learned over and over again. This also placed constraints on the development of the lingua franca, the potential creativity, and the influence of substrate languages. Sankoff and Laberge also explain the spread of Tok Pisin in terms of its learnability:

An important reason why Tok Pisin has had a selective advantage over the other languages with which one might say it has been in competition...may be that it is easier to learn as a second language. Like other pidgin languages, it has been, up to the present, nobody's native language, but rather a second language for all its speakers. A language relatively easy to learn because, also like other pidgin languages, it had in comparison with natural languages a relatively limited vocabulary, relatively few grammatical categories, and a relative lack of grammatical complexity. (1980:196)



While its relative simplicity meant that MPE was easily learned, the converse was also true, that is, MPE's learnability meant it had to remain optimally simple. As a lingua franca, MPE had to be easy to learn, and therefore had to maintain its simplicity, at least for as long as it was still spreading and being learned. Once it had established itself in a given area and was well-known by the population, the learnability factor was no longer essential, and complexities could begin to develop. Nonetheless, the development was automatically restricted while the language remained a lingua franca, lest its function as such be undermined. This is an important factor constraining the development of Tok Pisin. As Mühlhäusler notes, monolingual Tok Pisin speakers have not drastically altered the form of the language as one might expect in creolisation: 'young children speak a faster and structurally more advanced variety but revert to a more conservative norm...as they grow older' (1980a:57).

Those innovations based on a common MNAN core had the advantage of easy learnability over other substrate-influenced forms that were area-specific, and the former survived where the latter were lost or never became fully productive, as in the case of the use of *mek-* as a causative prefix. Although most MNAN languages have a causative prefix, its function and the choice of verbs to which it may be affixed varies in the substrate languages. Furthermore, it was a 'luxury', since the transitive suffix *-im* could fulfil the same function; indeed, transitive suffixes are used in some MNAN languages where others prefer the causative prefix. Such underlying variation in the substrate languages leading to variation in the pidgin undermines learnability, and this accounts, in part, for why certain widespread substrate features may ultimately be rejected. On the other hand, the development of 'all' as a third person plural pronoun and a plural marker *ol* was possible since so many MNAN languages have similar plural marking devices. The choice of this particular lexical item and the prenominal placement of the plural marker were determined by its adoption at an earlier point, while its success was due, not only to its match with many of the substrate languages, but also to its semantic transparency. The comparable use of the third person plural pronoun in Caribbean creoles points to a similar solution to the problem of marking plurality, but in this case the substrate African languages do not have a comparable use of the third person pronoun as a plural marker. An important difference between the Melanesian invention and the Caribbean one is that the Melanesians did not adopt an English pronoun like 'they' or 'them', but chose the English adjective 'all' which they then applied to plural and pronominal functions. The Caribbeans began with 'them' and extended it to a nominal pluraliser. For the latter, the semantic relationship between a plural pronoun and a plural marker influenced the development of plural marking, but for Melanesians the same semantic relationship was available in many of their own languages, and it influenced the application of an English adjective to both roles. In both cases, however, the 'iconicity' or semantic transparency of the resultant structure supported its stabilisation.

Once these developments were widely accepted and had stabilised, many became productive, allowing further expansion of the language. This productivity sometimes led certain structures to occur in places where MNAN languages are less productive. For instance, the development of *stap* as a durative aspect marker and *save* as a habitual aspect marker has resulted in two discrete aspects in Tok Pisin (and Bislama) where a number of MNAN languages use a single aspect marker for both. Conversely, productivity also allowed structures to do double duty for two or more MNAN structures. Thus *-im* has come to function as both a transitive and a causative marker, whereas MNAN languages usually distinguish between transitive and causative. Similarly, *b(i)long* is used

for possession and purpose, whereas some MNAN languages have distinctive connective morphemes for these two purposes.

At this point, the MNAN input into the grammaticalisation of English lexical items meant that the lingua franca had to be learned by Europeans as a second language rather than as a form of pidginised English if they wished to close the social distance with Melanesians. That not all Europeans were interested in closing this gap gave rise to the variant of Tok Pisin called Tok Masta, or at least to highly anglicised registers. Lack of familiarity with the standard form of Tok Pisin still causes some Europeans to believe that Melanesians are incapable of learning English, thus perpetuating racism and maintaining social distance. On the other hand, those who wish to close the social gap, such as some resident Europeans (especially those who remained in Papua New Guinea or came to Papua New Guinea after independence in 1975), as well as non-resident researchers such as linguists or anthropologists, succeed in doing so by learning the native form of the language, thereby becoming *wantok*, or co-linguals, an important in-group association.

The most salient role played by Europeans in the development of MPE is the use of the language in a standardised written form and the establishment of an educational system. This provided the language with prestige, and prestige fixed certain features. Any input on the Europeans' part which resulted from first language interference could thus become established in the language. As an example, the expanding productivity of the plural marker *ol* may have been influenced (or at least encouraged) by the use of the obligatory plural in European languages. Thus translations (especially of the Bible) into Tok Pisin, Pijin and Bislama by Europeans are likely to have abundant plural marking. A more obvious effect is the continued adoption of English lexical items and the anglicisation of certain phonemes, such as the reintroduction in certain sociolects of Tok Pisin of a /p:/f/ distinction.

Mühlhäusler's (1979) independent development approach to the growth and expansion of Tok Pisin is a revealing study of the increased productivity of certain morphemes and structures independent of MNAN languages. Although Keesing's criticisms regarding the placement of certain developments after the separation of Tok Pisin from MPE need to be taken into account, they do not generally detract from the observation that once a structure was in place and relatively stable, further developments through increased productivity could follow. A caution, however, needs to be expressed. That these morphemes or structures are rare or non-existent in the earliest documented forms of MPE does not imply that they evolved *ex nihilo* or that they were generated by the pidgin itself. Many were originally adapted to fulfil MNAN language needs, even if their modern usage extends beyond the use of similar constructions in MNAN languages. Without this initial adoption and allocation to a function, such forms could never have become productive and expanded beyond MNAN boundaries:

The substratum argument is...weakened by the fact that, in his early stages of second-language learning, a learner simply does not have functors such as plural in his grammar...two reasons being that plural is a marked semantactic category and thus 'late' in any developmental hierarchy and that inflectional morphology gets reduced or lost in language-contact or incipient learning contexts...One would predict, as suggested by Schuchardt, that, irrespective of whether speakers of substratum languages have a

morphological category plural in their vernacular, they will not carry over any conventions for plural marking into the pidgin in its formative period. However, we can expect attempts to cope with the semantic notion of plurality where disambiguation is called for. (Mühlhäusler 1980a:40)

Although Keesing (1988a:1) has argued that plural marking in MPE is not a late development, it is equally important to address Mühlhäusler's contention (1980a:40) that substratum comparisons are static and therefore uninformative. This stance derives from the belief that many substratum studies imply a direct relationship between modern forms, and that the developmental continuum can be dissected into discrete stages, with overpowering explanatory forces for each. While I would agree that substratum and independent development along internally-constrained lines have differing strengths of influence at different stages, one must be cautious not to throw out evidence for one explanation when it occurs at the 'wrong' time, that is, to give preference of one explanation over another based on developmental timing. Equally static are discrete explanations related to discrete developmental stages. As Mühlhäusler (1986:132) himself notes, there may be a conspiracy of forces; this means that isolating a primary force at a given time is problematic and relatively uninformative.

It is suggested here that a so-called 'static' synchronic comparison of MNAN languages and the modern Bislamic languages can be informative, even where structures differ from substrate languages or from developmental schema, by suggesting the source of the structures that ultimately become productive and the impetus for making them and not others productive (even those where substrate influence, though expected, fails, as in the case of reduplicated intransitive verbs and prefixed causatives).

Another problem with substratum studies, such as that provided by Mosel (1980), is the implication that a single substrate language, in this case Tolai, has a direct effect on the syntax of Tok Pisin. Mosel points out that a comparison of Tolai syntax with Tok Pisin syntax shows a number of discrepancies in usage. For example, when Mosel notes the differences between the positions of adjectives, the structure of the possessive construction and the distribution of the plural marker in Tolai and Tok Pisin, she concludes:

Since the position of the adjectives and the possessive construction do not reflect the structure of the superstrat language English, independent development of Tok Pisin must be assumed. (1980:120)

In other words, Mosel concludes that since differences between Tolai and Tok Pisin eliminate the possibility of substratum influence, and since these same differences occur between English and Tok Pisin, they must be generated by Tok Pisin itself.

Her conclusion reflects one of Mühlhäusler's criticisms about substratum theory: that direct causal relationships are often based on synchronic data. Mosel's synchronic focus on Tok Pisin and Tolai misses the possibility that the word order, distribution and use of particular lexical items and constructions were already well-established in Tok Pisin's antecedent, MPE, and once set in motion they became productive in new ways. Tolai could not have acted as a substratum on Tok Pisin without having entirely restructured MPE first. Diachronic evidence and comparisons with Pijin and

Bislama show that MPE entered Papua New Guinea with a structure that was already relatively well stabilised, so Tolai was not 'in the right place at the right time'. Furthermore, what is at issue is a comparison not with Tolai form but with Tolai content. Tok Pisin and Tolai agree on the semantic content of the plural marker and of possessive morphemes, even if these elements are ordered differently or subject to different rules regarding usage. Tolai has a more complex set of structures for marking binominal relationships than Tok Pisin or many MNAN languages do, but a convergence of all these specialised Tolai morphemes into a single Tok Pisin morpheme simply means that Tok Pisin is less specialised than Tolai. Thus, the semantic content of the Tolai morphemes *ka-*, *a-*, *i* and *na* is packed into a single Tok Pisin morpheme, *bilong*.

Nonetheless, Mosel's study is informative and useful as a synchronic comparison of Tok Pisin and Tolai, with its implications for the relationship of Bislamic languages to MNAN languages. It also makes the point that a comparison of Tolai with Tok Pisin is problematic. The substratum studies provided by Camden (1979), Walsh (1978), Simons (1985) and Crowley (1987b, 1988) are also informative in this regard, given their caveat that Tangoan, Raga, To'abaita and Paamese respectively are acting as representatives of many MNAN languages and that this makes no statement about a direct relationship between these languages and Bislama, Pijin or Tok Pisin.

Charpentier (1979b) examines a number of languages of South Malekula, Vanuatu, again as representatives of MNAN languages. Although he does not extend the study beyond South Malekula, he makes the point that the relationship between South Malekulan languages and Bislama is best described in semantic terms. Keesing's work (see references), however, is the most thoroughly researched to date, both in terms of the historical development of Pacific pidgin into MPE and Bislamic, and in terms of the incorporation of a larger language base, in this case Eastern Oceanic languages.

The present study does not present a complete picture of the history and development of Tok Pisin and its relationship to MNAN languages and the other Bislamic languages. While the evidence it presents for substratum influence must be coupled with the work done by Mühlhäusler and others for the best understanding of how Tok Pisin in particular has arrived at its modern form, our ultimate knowledge will be shaped by researchers currently working on MNAN languages, on the history of the Pacific and the pidgins that resulted, on regional variation and archaisms in bush communalects and various other relevant topics. Scholars like Tryon, Baker, Mühlhäusler, Crowley, Charpentier, Clark, Keesing and numerous others have already begun to fill in missing pieces of the puzzle. Our colleague, Don Laycock, will be sorely missed in this endeavour.

## APPENDIX I

### SAMPLE LANGUAGES

The languages used in this study as sample languages are listed below with their locations and with the sources from which the data are taken. Alternate language names are indicated by an equal sign.

LANGUAGE	LOCATION	SOURCES
1. VANUATU		
Lenakel	Tanna	Lynch 1978
Tanna	Tanna	Lynch 1982
Sie = Eromanga	Eromanga	Lynch 1983
Nguna = Efatese	Nguna, Efate and Tongoa	Schütz 1969a,b; Facey (per. com.)
Paamese = Lopevi	Paama	Crowley 1982
Ambrym = Lonwolwol	Ambrym	Paton 1971
Port Sandwich = Lamap	Malekula	Charpentier 1979a,b
Big Nambas	Malekula	Fox 1979
Tangoan	Tangoa Island, Santo	Camden 1979; Ray 1926
Raga	Raga Island, Pentecost	Walsh 1978, 1981; Tryon 1973
Mota	Mota Island, Banks	Codrington 1885, 1896; Tryon 1973
2. SOLOMON ISLANDS		
Arosi	San Cristoval	Capell 1971
Sa'a	Malaita	Ivens 1918; Codrington 1885
Kwaio	Malaita	Keesing 1975, 1985
Longgu	Guadalcanal	Ivens 1935b
Vaturanga = Ndi	Guadalcanal	Ivens 1935c; Codrington 1885
Nggela = Florida	Florida Island	Ivens 1937; Codrington 1885
Bugotu	Santa Ysabel	Ivens 1935a; Codrington 1885

## 3. PAPUA NEW GUINEA

Tigak	New Ireland	Beaumont 1979
Tolai = Kuanua	New Britain	Mosel 1980, 1984
Nakanai = Lakalai, Bileki	New Britain	Johnston 1980
Lusi = Kaliai	New Britain	Goulden (fieldnotes)
Kove = Kombe	New Britain	Goulden (fieldnotes)
Kabana = Bariai	New Britain	Goulden (fieldnotes)
Kilenge = Maleu	New Britain	Goulden (fieldnotes)
Manam	Manam Island, Madang	Lichtenberk 1983
Balawaia = Sinaugoro	Central District	Kolia 1975

These sample languages represent fourteen different language subgroupings of the Oceanic branch of Austronesian (see Ross (1988) for a more recent analysis):

- (1) Southern Vanuatu Group: Lenakel, Tanna and Sie (Lynch 1982:3)
- (2) Efatese Group: Nguna (Tryon 1972:69)
- (3) Central Vanuatu Group: Ambrym and Paamese (Tryon 1972:69)
- (4) South Malekulan Group: Port Sandwich (Tryon 1972:69)
- (5) North Malekulan Group: Big Nambas (Tryon 1972:69)
- (6) Northern Vanuatu Group: Tangoa, Raga and Mota (Tryon 1972:68)
- (7) Cristobal-Malaitan Group: Sa'a, Kwaio and Longgu (Pawley 1972:98)
- (8) Guadalcanal-Nggelic Group: Nggela, Bugotu and Vaturanga (Pawley 1972:98)
- (9) Patpatar-Tolai Group: Tolai (Beaumont 1972:12)
- (10) Northern New Ireland Group: Tigak (Beaumont 1972:12)
- (11) Kimbe Group: Nakanai (Johnston 1980:9)
- (12) Siasi Group: Lusi, Kove, Kabana and Kilenge (Chowning 1969)
- (13) Medebur-Sepa-Manam Group: Manam (Z'graggen 1976:286)
- (14) Central Province: Balawaia and Motu (Pawley 1976:301)

## APPENDIX II

### PHONEME CHARTS

The phoneme inventories of the MNAN languages used in this study are provided below, followed by a brief discussion of the orthographies used by the authors and the orthographic changes made for the purpose of consistency in this study.

#### (1) VANUATU

##### Lenakel (Lynch 1978:8-18)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>k</i>	<i>i</i>	<i>i:</i>		<i>u</i>	<i>u:</i>
<i>f</i>		<i>s</i>	<i>h</i>	<i>e</i>	<i>e:</i>	<i>ɨ</i>	<i>o</i>	<i>o:</i>
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>			<i>a</i>		
		<i>l</i>						
		<i>r</i>						
<i>w</i>		<i>v</i>						

##### South-west Tanna (Lynch 1982:5-8)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>k</i>	<i>kw</i>	<i>i</i>	<i>i:</i>		<i>u</i>	<i>u:</i>
<i>ɸ</i>		<i>s</i>	<i>h</i>		<i>e</i>	<i>e:</i>	<i>ɨ</i>	<i>o</i>	<i>o:</i>
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>				<i>a</i>	<i>a:</i>	
		<i>l</i>							
		<i>r</i>							
		<i>v</i>							

##### Sie (Lynch 1983:13-17)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>k</i>	<i>i</i>		<i>u</i>
		<i>nd</i>		<i>e</i>		<i>o</i>
<i>ɸ</i>		<i>s</i>	<i>h</i>		<i>a</i>	
<i>β</i>			<i>ɣ</i>			
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>			
		<i>l</i>				
		<i>r</i>				
<i>w</i>			<i>y</i>			

## Nguna (Schütz 1969a:13-19)

<i>p</i>	<i>p̄</i>	<i>t</i>	<i>k</i>	<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>f</i>		<i>s</i>		<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>
<i>m</i>	<i>m̄</i>	<i>n</i>	<i>ŋ</i>			<i>a</i>	<i>a:</i>
		<i>l</i>					
		<i>r</i>					
<i>w</i>		<i>y</i>					

## Paamese (Crowley 1982:12-57)

<i>p</i>	<i>t</i>	<i>k</i>	<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>mb</i>	<i>nd</i>	<i>ŋg</i>	<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>
<i>v</i>	<i>s</i>	<i>h</i>			<i>a</i>	<i>a:</i>
<i>m</i>	<i>n</i>	<i>ŋ</i>				
	<i>l</i>					
	<i>r</i>					
	<i>y</i>	<i>w</i>				

## Ambrym (Paton 1971:1-9)

<i>p</i>	<i>t</i>	<i>k</i>	<i>i</i>	<i>ü</i>	<i>u</i>
<i>b</i>	<i>bw</i>	<i>d</i>	<i>l</i>		<i>U</i>
<i>f</i>	<i>fw</i>	<i>s</i>	<i>c</i>	<i>h</i>	<i>o</i>
<i>v</i>	<i>vw</i>				<i>ɔ</i>
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>	<i>a</i>	<i>a:</i>
		<i>r</i>			
		<i>l</i>			
<i>w</i>		<i>y</i>			

## Port Sandwich (Charpentier 1979a:37)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>c</i>	<i>k</i>	<i>i</i>	<i>ü</i>	<i>u</i>
<i>b</i>	<i>bw</i>	<i>d</i>		<i>g</i>	<i>e</i>	<i>ö</i>	<i>o</i>
<i>mb</i>	<i>mbw</i>	<i>ndr</i>		<i>ŋg</i>			<i>a</i>
<i>v</i>	<i>vw</i>	<i>s</i>		<i>x</i>			
		<i>l</i>					
		<i>r</i>					

## Big Nambas (Fox 1979:1-5)

<i>p</i>	<i>p'</i>	<i>t</i>	<i>k</i>	<i>i</i>		<i>u</i>
		<i>nd</i>		<i>e</i>		
<i>β</i>	<i>β'</i>		<i>y</i>		<i>ə</i>	
		<i>s</i>			<i>a</i>	
<i>m</i>	<i>m'</i>	<i>n</i>				
		<i>l</i>				
		<i>r</i>				



## Tangoan (Camden 1979:112-113)

<i>p</i>	<i>p'</i>	<i>t</i>	<i>c</i>	<i>k</i>	<i>i</i>	<i>u</i>
		<i>s</i>		<i>x</i>	<i>e</i>	<i>o</i>
<i>v</i>	<i>v'</i>					<i>a</i>
<i>m</i>	<i>m'</i>	<i>n</i>		<i>ŋ</i>		
		<i>l</i>				
		<i>r</i>				
		<i>ř</i>				

## Raga (Walsh 1981:361)

		<i>t</i>	<i>k</i>	<i>i</i>	<i>u</i>
<i>b</i>	<i>bw</i>	<i>d</i>		<i>e</i>	<i>o</i>
			<i>ŋg</i>		<i>a</i>
		<i>s</i>	<i>h</i>		
<i>v</i>	<i>vw</i>		<i>ɣ</i>		
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>		
		<i>l</i>			
		<i>r</i>			
<i>w</i>					

## Mota (Codrington 1896:xii-xiii)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>k</i>	<i>i</i>	<i>u</i>
<i>v</i>		<i>s</i>	<i>ɣ</i>	<i>e</i>	<i>o</i>
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>		<i>a</i>
<i>w</i>		<i>l</i>			
		<i>r</i>			

## (2) SOLOMON ISLANDS

## Arosi (Capell 1971:5)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>k</i>	<i>kw</i>	<i>?</i>	<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>b</i>	<i>bw</i>	<i>d</i>	<i>g</i>	<i>gw</i>		<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>
		<i>s</i>						<i>a</i>	<i>a:</i>
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>						
		<i>r</i>							
<i>w</i>									

## Sa'a (Ivens 1918:139)

<i>p</i>	<i>pw</i>	<i>t</i>	<i>k</i>	<i>?</i>	<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
		<i>d</i>			<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>
		<i>s</i>	<i>h</i>				<i>a</i>	<i>a:</i>
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>					
		<i>l</i>						
		<i>r</i>						

## Kwaio (Keesing 1975:xiv-xv)

	<i>t</i>	<i>k</i>	<i>kw</i> ?
<i>mb</i>	<i>nd</i>	<i>ŋg</i>	<i>ŋgw</i>
∅	<i>s</i>		
<i>m</i>	<i>n</i>	<i>ŋ</i>	<i>ŋw</i>
	<i>l</i>		
			<i>w</i>

<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>

*a a:*

## Longgu (Ivens 1935b:604)

<i>p</i>		<i>t</i>	
<i>mb</i>	<i>mbw</i>	<i>nd</i>	<i>ŋg</i>
			<i>g</i>
<i>v</i>	<i>vw</i>	∅	
		<i>s</i>	
<i>m</i>	<i>mw</i>	<i>n</i>	<i>ŋ</i>
		<i>l</i>	
		<i>r</i>	

<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>

*a a:*

## Vaturanga (Ivens 1935c:351)

<i>p</i>	<i>t</i>	<i>c</i>	<i>k</i>
<i>mb</i>	<i>nd</i>	<i>nj</i>	<i>ŋg</i>
	<i>s</i>		<i>h</i>
<i>v</i>			
<i>m</i>	<i>n</i>		<i>ŋ</i>
	<i>l</i>		
	<i>r</i>		

<i>i</i>		<i>u</i>
<i>e</i>		<i>o</i>

*a*

## Nggela (Ivens 1937:1076-1077)

<i>p</i>	<i>t</i>	<i>k</i>
<i>mb</i>	<i>nd</i>	<i>ŋg</i>
	<i>s</i>	<i>h</i>
<i>v</i>		<i>y</i>
<i>m</i>	<i>n</i>	<i>ŋ</i>
	<i>l</i>	
	<i>r</i>	

<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>

*a a:*

## Bugotu (Ivens 1935a:142-143)

<i>p</i>	<i>t</i>	<i>c</i>	<i>k</i>
<i>mb</i>	<i>nd</i>	<i>nj</i>	<i>ŋg</i>
	<i>s</i>		<i>h</i>
<i>v</i>	∅		<i>y</i>
<i>m</i>	<i>n</i>	<i>ñ</i>	<i>ŋ</i>
	<i>l</i>		
	<i>r</i>		

<i>i</i>	<i>i:</i>	<i>u</i>	<i>u:</i>
<i>e</i>	<i>e:</i>	<i>o</i>	<i>o:</i>

*a a:*

## (3) PAPUA NEW GUINEA

## Tigak (Beaumont 1979:13-15)

*p*     *t*         *k*  
*b*                 *g*  
*β*     *s*  
*m*     *n*         *ŋ*  
          *l*  
          *r*

*i*                                 *u*  
*e*                                 *o*  
                                 *a*

## Tolai (Mosel 1980:9-21)

*p*     *t*         *k*  
*mb*   *nd*       *ŋg*  
*β*     (*s*)  
*m*     *n*         *ŋ*  
          *l*  
          *r*

*i*     *i:*                                 *u*     *u:*  
*e*     *e:*                                 *o*     *o:*  
                                 *ɐ*     *ɐ:*  
                                 *a*     *a:*

## Nakanai (Johnston 1980:249)

*p*     *t*         *k*  
*b*     *d*         *g*  
          *s*         *h*  
*β*  
*m*  
          *l*  
          *r*

*i*                                 *u*  
*e*                                 *o*  
                                 *a*

## Lusi

*p*     *t*         *k*  
*mb*   *nd*       *ŋg*  
          *s*         *h*  
*β*     *z*         *ɣ*  
*m*     *n*         *ŋ*  
          *l*  
          *r*

*i*                                 *u*  
*e*                                 *o*  
                                 *a*

## Manam (Lichtenberk 1983:12-83)

*p*     *t*                                 *q ~ ?*  
*b*     *d*                                 *g*  
          *s*  
          *z*  
*m*     *n*         *ŋ*  
          *l*  
          *r*

*i*                                 *u*  
*e*                                 *o*  
                                 *a*

## Balawaia (Kolia 1975:109-110)

<i>p</i>	<i>t</i>	<i>k</i>	<i>kw</i>	<i>i</i>	<i>u</i>
<i>b</i>	<i>d</i>	<i>g</i>	<i>gw</i>	<i>e</i>	<i>o</i>
<i>β</i>		<i>ɣ</i>	<i>ɣw</i>		<i>a</i>
<i>m</i>	<i>n</i>				
	<i>l</i>				
<i>w</i>					

The examples used in the text of this study are based on the orthographies used in the sources, but a few changes have been made for the sake of consistency:

- (1) /ŋ/ is consistently written as <ŋ> in lieu of <g> or <ng>.
- (2) /x/, /č/ and /j/ are consistently written as <x>, <c> and <j>. For Tangoan, Camden (1979) writes <c> for a voiceless velar fricative and <j> for a voiceless alveolar affricate, and these are replaced here by <x> and <c>. In Vaturanga, /c/ and /j/ represent the affricates [ts] and [dz].
- (3) The apicolabials are written with an apostrophe <p' v' m'> following Fox's (1971) orthography, instead of Camden's (1979) usage of italics: <p v m>. In Nguna, <ḡ> and <ṁ> represent implosives.
- (4) The glottal stop is written here as <ʔ> in preference to an apostrophe or <q>.

Some remarks on the value of certain symbols should be noted as well:

- (1) Voicing is often problematic. In Lenakel, the voiceless stops /p/, /pw/, /t/ and /k/ are voiced [b], [bw], [d] and [g] medially, and in initial position voicing is variable. Tanna voiceless stops /p/, /pw/, /t/ and /kw/ are voiced [b], [bw], [d], [g] and [gw] except in word-final position. In Ambrym, the voiceless stops [p], [t], [c] and [k] vary with their voiced counterparts [b], [d], [j] and [g]. It is possible that these are either allophonic or free variations. Nonetheless, I have followed Paton's (1971) orthography in this study. Both Schütz (1969a) and Crowley (1982) use <v> in Nguna and Paamese respectively, although voicing is not significant and [f] occurs in most environments. Big Nambas /β/, /β'/, /ɣ/ are voiceless [ɸ], [ɸ'], [x] in initial and final positions. Kwaio /f/ is voiced [v ~ β] intervocalically. In Raga, /b/, /v/, /vw/, /ɣ/ can be voiced or voiceless. Balawaia /ɣ/ may be voiceless or voiced [ɣ ~ x] in word-initial position.
- (2) <r> represents either a tap [ɾ] or a trill [r̄], depending on the language. Only Tangoan differentiates between taps and trills, and so in the Tangoan examples <r> represents a tap and <r̄> is a trill. The orthography for Lusi used by Counts (1969) has <r̄> where I use <z>. /z/ has both fricative and tap variants, but <z> reflects more accurately the status of this phoneme which is diachronically and synchronically a member of the fricatives. This orthography also avoids the problem of positing two /r/ phonemes for Lusi.
- (3) <f> represents either a bilabial fricative [ɸ] or a labiodental fricative [f] according to the language involved, since none of the sample languages differentiate between [f] and [ɸ]. In Sie and Kwaio, /ɸ/ has both [f] and [ɸ] allophones. In Paamese, /f/ (written <v>) has [f], [v], [ɸ], [β] allophones.
- (4) <v> represents either a bilabial fricative [β] or a labiodental fricative [v] since no language used here differentiates between them. Sie has [v] and [β] allophones of /β/. In Lenakel and Tanna, <v> is used to represent the glide counterpart of [ɨ]. The phonetic realisation of <v> is unclear from Iven's and Codrington's discussions, but Codrington (1885:256) says of Mota that 'v approaches nearer to b: *lava* was at first written *laba*', which suggests that in Mota at least <v> = [β].

(5) Following the authors' orthographies, <b, d, g> may represent either oral stops [b], [d], [g] or prenasalised stops [mb], [nd], [ŋg] in those languages that do not differentiate between them. In Port Sandwich, which has both oral and prenasalised series of voiced stops, <b, d, g> represent the oral stops and <mb, nd, ŋg> represent the prenasalised stops. Raga voiced stops /b/, /bw/, /d/ have prenasalised allophones. In Bugotu, the prenasalised stops /mb/, /nd/, /ŋg/ vary with their oral counterparts: [b], [d], [g].

(6) <g> may represent either a stop [g] or a fricative [ɣ] in languages that do not differentiate between them. In Balawaia, which has both, these are written as <g> and <ɣ> respectively. Lynch's (1983) use of <ɣ> in his description of Sie is maintained.

(7) Vowel length is indicated by geminate vowels, by a colon or by a macron, according to the usage of the authors (i.e. <aa> = <a:> = <ā>).

(8) The articulation of Mota <mw> and <pw> is unclear from Codrington's description. Capell and Layard (1980:13) describe [mw] as a nasalised [w], and [q] as 'a velarised p with simultaneous glottal closure, in the International Phonetic Script p<sup>w</sup>'. Codrington's [m] is written as [mw] here, following Tryon (1973), and Codrington's [q] is transcribed as [pw] following Capell, although these symbols may inaccurately reflect the phonetic value of the phones involved.

# APPENDIX III

## PLURAL MARKING

Plurality is marked in three ways: (a) by the use of third person pronominal forms; (b) by the use of specific plural morphemes; and (c) by the use of reduplication.

(a) The use of third person plural pronominal forms:

PAAM	<i>molatine</i>	<i>kailue</i>	
	man	3d	
	two men		(Crowley 1982:95)
	<i>molatine</i>	<i>kaitelu</i>	
	man	3t	
	(a few) men		(Crowley 1982:95)
	<i>molatine</i>	<i>kaile</i>	
	man	3p	
	men		(Crowley 1982:95)
AMBR	<i>vanten</i>	<i>ŋe</i>	
	man	3p	
	the men		(Paton 1971:24)
TANG	<i>la</i>	<i>tamloxi</i>	<i>sei</i>
	3p	man	this
	these men		(Camden 1979:79)
RAGA	<i>ira</i>	<i>vavine</i>	
	3p	woman	
	the women		(Walsh 1978:188)
AROS	<i>iraau</i>	<i>na</i>	<i>Wajo</i>
	3p	nm	Wango
	the Wango	people	(Capell 1971:42)
KWAI	<i>gila</i>	<i>ma'a</i>	<i>a-na</i>
	3p	father	poss-3s
	his fathers		(Keesing 1985: 87)

LONG	<i>ingira na ngeni</i> 3p nm woman the women	(Ivens 1935b:605)
VATU	<i>hira na tinoni</i> 3p nm man the men	(Ivens 1935c:356)
	<i>tinoni hira</i> man 3p men	(Codrington 1885:541)
NGGE	<i>ra na tinoni</i> 3p nm man men	(Ivens 1937:1079)
	<i>ngaira na mane</i> 3p nm man the men	(Ivens 1937:1079)
BUGO	<i>iira na vaivine</i> 3p nm woman the women	(Ivens 1935a:151)
NAKA	<i>egite la bolo</i> 3p nm pig the pigs	(Johnston 1980:175)
KILE	<i>na-iua-re</i> nm-woman-3p the women	
LUSI	<i>asizi ai-nat=natu</i> 3p 3s-rd=child his sons	
MANA	<i>aine para-di</i> woman this-3p those women	(Lichtenberk 1983:267)
BALA	<i>vavine-ria</i> woman-3p women	(Kolia 1975:123)
	<i>belema bara-ria</i> python big-3p big pythons	(Kolia 1975:123)

## (b) The use of specific plural morphemes:

LENA	<i>kuri miin aan</i> dog pl that those dogs	(Lynch 1978:37)
SIE	<i>nur-su</i> place-coll every place, everywhere	(Lynch 1983:36)
	<i>ov-nur</i> pl-place places	(Lynch 1983:36)
	<i>ov-nur-su</i> pl-place-coll the places	(Lynch 1983:36)
NGUN	<i>na-niu maaga</i> nm-coconut pl the coconuts	(Schutz 1969a:46)
PORT	<i>na-im gail</i> nm-house pl houses	(Charpentier 1979a:66)
MOTA	<i>imwa gaŋ</i> house pl houses	(Codrington 1896:xv)
	<i>o taure imwa</i> nm coll house (a collection of) houses	(Codrington 1885:263)
AROS	<i>na mwani heʔu</i> nm pl star the stars	(Capell 1971:44)
SA'A	<i>mu ʔinoni</i> pl man the men	(Ivens 1918:143)
KWAI	<i>ni ʔifi</i> pl house the houses	(Keesing 1985:87)
BUGO	<i>na komi tinoni</i> nm pl man the men	(Ivens 1935a:151)
	<i>na koi vaivine</i> nm coll woman (a group of) women	(Ivens 1935a:145)





# APPENDIX IV

## POSSESSIVE MARKING

Possession may occur as (1) inalienable possession; (2) single class alienable possession; (3) neutral and edible possession; (4) binominal possession using the possessive constructions; and (5) binominal possession using connective morphemes.

(1) Inalienable possession:

LENA	<i>neri-k</i> child-1s my child	(Lynch 1978:79)
TANN	<i>lim-k</i> father-1s my father	(Lynch 1982:27)
SIE	<i>noru-ŋ</i> hand-1s my hand	(Lynch 1983:44)
NGUN	<i>na-mata-ŋu</i> nm-eye-1s my eye	(Facey, personal communication)
PAAM	<i>natu-ku</i> child-1s my child	(Crowley 1982:108)
AMBR	<i>batɔ-k</i> head-1s my head	(Paton 1971:29)
PORT	<i>vea-ŋg</i> hand-1s my hand	(Charpentier 1979a:76)
NAMB	<i>pət-ək</i> head-1s my head	(Fox 1979:25)

TANG	<i>tina-ku</i> mother-1s my mother	(Ray 1926:358)
RAGA	<i>ira nitu-ra</i> 3p child-3p their children	(Walsh 1981:379)
MOTA	<i>na pane-k</i> nm hand-1s my hand	(Codrington 1885:267)
AROS	<i>ia ama-gu</i> nm father-1s my father	(Capell 1971:57)
SA'A	<i>?ae-ku</i> leg-1s my leg	(Ivens 1918:4)
KWAI	<i>nima-gu</i> hand-1s my hand	(Keesing 1985:23)
LONG	<i>a ngale-mu</i> nm child-2s your child	(Ivens 1935b:620)
VATU	<i>na kima-ngu</i> nm hand-1s my hand	(Ivens 1935c:360)
NGGE	<i>lima-ngu</i> hand-1s my hand	(Ivens 1937:1083)
BUGO	<i>daðe-ngu</i> child-1s my son	(Ivens 1935a:154)
TIGA	<i>na tiga-k</i> nm brother-1s my brother	(Beaumont 1979:59)
TOLA	<i>a bala-gu</i> nm belly-1s my belly	(Mosel 1984:32)
NAKA	<i>la lima-gu</i> nm hand-1s my hand	(Johnston 1980:168)

- LUSI     *lima-gu*  
hand-1s  
my hand
- MANA     *tama-gu*  
father-1s  
my father  
(Lichtenberk 1983:278)
- BALA     *au yima-yu*  
1s hand-1s  
my hand  
(Kolia 1975:125)
- (2) Single class alienable possession:
- SIE        *nimo horu-ŋ*  
house poss-1s  
my house  
(Lynch 1983:44)
- nimo eni-au*  
house prep-1s  
my house  
(Lynch 1983:44)
- NGUN     *na-suŋa aŋi-nau*  
nm-house poss-1s  
my house  
(Schütz 1969a:55)
- PORT     *na-öaŋg isa-n*  
nm-canoe poss-3s  
his canoe  
(Charpentier 1979a:73)
- NAMB     *p'raren na-k*  
sweat poss-1s  
my sweat  
(Fox 1979:27)
- SA'A     *nima inau*  
house 1s  
my house  
(Ivens 1918:143)
- KWAI     *ʔifi a-gu*  
house poss-1s  
my house  
(Keesing 1985:23)
- TIGA     *ka-na lui*  
poss-3s house  
his house  
(Beaumont 1979:62)
- a lui tata-na*  
nm house poss-3s  
his house  
(Beaumont 1979:62)
- lui tesu-na*  
house poss-3s  
his house  
(Beaumont 1979:63)

NAKA	<i>la luma ta-ku</i> nm house prep-1s my house	(Johnston 1980:182)
LUSI	<i>luma to-gau</i> house prep-1s my house	
(3) Neutral and edible possession:		
LENA	<i>nuw miin niko-k</i> yam pl poss-1s my yams (to eat)	(Lynch 1978:80)
	<i>nimwa taha-k</i> house poss-1s my house	(Lynch 1978:82)
TANN	<i>nekw na-m</i> yam poss-2s your yam (to eat)	(Lynch 1982:44)
	<i>kuli kafa-k</i> dog poss-1s my dog	(Lynch 1982:27)
PAAM	<i>auhu aa-ku</i> yam poss-1s my yam (to eat)	(Crowley 1982:211)
	<i>vakilii ona-ku</i> canoe poss-1s my canoe	(Crowley 1982:214)
AMBR	<i>a-k meleh</i> poss-1s food my food	(Paton 1971:43)
	<i>ha-m hal</i> poss-2s road your road	(Paton 1971:42)
TANG	<i>no-ku reti</i> poss-1s talk my talk	(Ray 1926:361)
	<i>xa-m ram</i> poss-2s yam your yam	(Ray 1926:362)
MOTA	<i>ga-na o nam</i> poss-3s nm yam his yam (to eat)	(Codrington 1885:271)

	<i>no-n o</i> poss-3s nm his paddle	<i>wose</i> paddle	(Codrington 1896:xiii)
AROS	<i>wai ?a-na</i> water poss-3s his water		(Capell 1971:59)
	<i>ruma a-mu</i> house poss-2s your house		(Capell 1971:58)
SA'A	<i>uhi ?a-kua</i> yam poss-1s my yam (to eat)		(Codrington 1885:518)
LONG	<i>a-da vaŋa</i> poss-3p food their food		(Ivens 1935b:612)
	<i>na-na malabu</i> poss-3s garden his garden		(Ivens 1935b:618)
VATU	<i>ha-na muza</i> poss-3s food his food		(Ivens 1935c:361)
	<i>na ni-na na pai</i> nm poss-3s nm dog his dog		(Ivens 1935c:361)
NGGE	<i>na ga-na beti</i> nm poss-3s water his water		(Ivens 1937:1092)
	<i>ni-na vale</i> poss-3s house his house		(Ivens 1937:1080)
BUGO	<i>ga-ña na vaŋa</i> poss-3s nm food his food		(Codrington 1885:547)
	<i>sa ni-ña fata</i> nm poss-3s thing his things		(Ivens 1935a:145)
TOLA	<i>a-na nian</i> poss-3s food his food		(Mosel 1980:115)

- kau-gu pal*  
poss-1s house  
my house (Mosel 1980:114)
- LUSI *a-gu haniŋa*  
poss-s food  
my food
- le-gu luma*  
poss-1s house  
my house
- MANA *boro ʔana-ŋ*  
pig poss-2s  
your pork (Lichtenberk 1983:291)
- ʔati ne-ŋ*  
canoe poss-2s  
your canoe (Lichtenberk 1983:294)
- BALA *ɣaniyani au-ya-yu*  
food 1s-poss-1s  
or: *au-ya-yu ɣaniyani*  
my food (Kolia 1975:125)
- vanua au-ye-yu*  
village 1s-poss-1s  
or: *au-ye-yu vanua*  
my village (Kolia 1975:125)

(4) Binominal possession in MNAN languages which use the possessive constructions:

- LENA *nelki-Ø pukas*  
leg-Ø pig  
the pig's leg (Lynch 1978:78)
- nite nik uusuaas*  
taro poss boy  
the boy's taro (to eat) (Lynch 1978:80)
- TANN *lukwanu kape lim-k*  
village poss father-1s  
my father's place (Lynch 1982:17)
- SIE *noru-n neteme*  
hand-3s man  
the man's hand (Lynch 1983:44)
- nimo en neteme*  
house prep man  
the man's house (Lynch 1983:44)

PORT	<i>na-im sa Petro</i> nm-house poss Petro Petro's house	(Charpentier 1979a:165)
NAMB	<i>vli-Ø ləpu</i> tail-Ø rat a rat's tail	(Fox 1979:25)
RAGA	<i>gatava-n ara-n vanua</i> doorway-3s fence-3s village the doorway of the village fence	(Walsh 1981:380)
MOTA	<i>o parapara no-n tama-na</i> nm axe poss-3s father-3s his father's axe	(Codrington 1885:271)
KWAI	<i>ariŋa-na wane</i> ear-3s man the man's ear	(Keesing 1985:107)
SA'A	<i>wala-na ŋa ʔinoni</i> voice-3s nm man the voice of a man	(Ivens 1918:41)
LONG	<i>lima-da a-ŋga na kana</i> hand-3p poss-1n nm enemy the hands of our enemy	(Ivens 1935b:608)
	<i>na kutu-da na vanua</i> nm heart-3p nm people the hearts of the people	(Ivens 1935b:608)
	<i>na luma na-na mwanekama</i> nm house poss-3s chief the chief's house	(Ivens 1935b:608)
VATU	<i>na lova-na na tinoni</i> nm head-3s nm man the man's head	(Ivens 1935c:360)
	<i>na hau a-dira na mane</i> nm knife poss-3p nm man the men's knife	(Ivens 1935c:356)
NGGE	<i>na tama-na na ŋgari</i> nm father-3s nm child the child's father	(Ivens 1937:1082)
BUGO	<i>lima-dia na vaivine</i> hand-3p nm woman the women's hands	(Ivens 1935a:150)



- NAKA     *la gama la tahalo*  
           nm head poss:nm man  
           the man's head (Johnston 1980:171)
- la bua te Pasi*  
           nm betelnut prep Pasi  
           Pasi's betelnut (Johnston 1980:168)
- LUSI     *tanta ai-zezava*  
           man 3s-head  
           the man's head
- tanta e-le luma*  
           man 3s-poss house  
           the man's house
- luma toni Susui*  
           house prep Susui  
           Susui's house
- MANA     *boro tahe-di*  
           pig faeces-3p  
           the pigs' excrements (Lichtenberk 1983:279)
- aine niu ?an-di*  
           woman coconut poss-3p  
           the women's coconuts (Lichtenberk 1983:291)
- BALA     *tau gima-na*  
           man hand-3s  
           the man's hand (Kolia 1975:126)
- tau ye-na vanua*  
           man poss-3s village  
           the man's village (Kolia 1975:126)
- (5) Binominal possession using connective morphemes:
- TANN     *nisin-i pilavin*  
           mother-c woman  
           the woman's mother (Lynch 1982:44)
- nekw na-i kwan*  
           yam poss-c fellow  
           the fellow's yam (Lynch 1982:17)
- NGUN     *na-mata ni na-anoai*  
           nm-eye c nm-man  
           the man's eye (Facey, personal communication)
- na-suṁa ki na-anoai*  
           nm-bed c nm-man  
           the man's bed (Facey, personal communication)

- na-vinaga ni na-anoai*  
nm-food c nm-man  
the man's food (Facey, personal communication)
- PAAM *mete-n hulii*  
eye-c dog  
the dog's eye (Crowley 1982:105)
- eau one-n Makii*  
knife poss-c Maki  
Maki's knife (Crowley 1982:106)
- AMBR *meleh a-n vanten ŋe*  
food poss-c man pl  
the men's food (Paton 1971:42)
- TANG *xica-n moli*  
name-c chief  
the name of the chief (Ray 1926:361)
- ima-n tam'a-ku*  
house-c father-1s  
my father's house (Ray 1926:361)
- xinau no-n tama-m'im*  
work poss-3s father-2p  
your father's work (Ray 1926:361)
- MOTA *mate (<mata-i) tanun*  
eye-c man  
a man's eye (Codrington 1896:xv)
- ime (<ima-i) tanun*  
house-c man  
a man's house (Codrington 1885:262)
- sinage (<sinaga-i) tanun*  
food-c man  
a man's food (Codrington 1885:262)
- sus tavine*  
breast woman  
a woman's breast (Codrington 1885:267)
- but: *susu-n raveve-na*  
breast-3s mother-3s  
his mother's breast (Codrington 1885:267)
- AROS *na ?uwa-na i noni*  
nm foot-3s c man  
the man's foot (Capell 1971:61)

- SA'A     *sape ni ?inoni*  
           body c man  
           men's bodies (Ivens 1918:68)
- manata-na mu ?inoni*  
           way-3s pl man  
           the nature of men (Ivens 1918:59)
- or:       *mu manata-?i ?inoni*  
           pl way-c man  
           the nature of men (Ivens 1918:41)
- KWAI     *alige-?e ku?i*  
           ear-c dog  
           the (butchered) pig's stomach (Keesing 1975:xxx)
- ga?i-a la ?ubuni*  
           mother-c nm Ubuni  
           Ubuni's mother (Keesing 1985:110)
- tarusi ni geni*  
           woman c bamboo  
           women's water bamboos (Keesing 1985:110)
- ?ifi naa wane*  
           house c man  
           the man's house (Keesing 1985:105)
- NGGE     *na vuvulu ni ulu-miu*  
           nm hair c head-2p  
           the hair on your heads (Ivens 1937:1083)
- na dale ni bolo*  
           nm child c pig  
           the pig's offspring (Ivens 1937:1088)
- BUGO     *sagaro ni/i gai*  
           fruit c tree  
           fruit of a tree (Codrington 1885:552)
- TIGA     *na tiga-na i Gamsa*  
           nm brother-3s c Gamsa  
           Gamsa's brother (Beaumont 1979:60)
- mamana ot ina masut*  
           pl thing c bush  
           things of the bush (Beaumont 1979:68)
- TOLA     *a tama i ra bul*  
           nm father c nm child  
           the child's father (Mosel 1980:114)

*a pal ka-i ra tutana*  
nm house poss-c nm man  
the man's house

(Mosel 1980:114)

*a nian a-i ra tutana*  
nm food poss-c nm man  
the man's food

(Mosel 1980:115)

## APPENDIX V

### MARKING PURPOSE AND LOCATION

Purpose phrases may be encoded in MNAN languages by (a) possessive morphemes; (b) specialised connective morphemes; or (c) juxtaposition. Location phrases are generally marked by specialised connective morphemes, often the same as those used in purpose phrases.

#### (1) Purpose:

##### (a) Possessive morphemes:

AMBR	<i>tan ne tel</i> ground poss garden ground for a garden	(Paton 1971:40)
NGUN	<i>na-vinaga ni raji saa</i> nm-food c time bad food for bad times	(Schütz 1969a:51)
NAMB	<i>nipal na pai</i> platform poss yam a yam platform	(Fox 1979:38)
SA'A	<i>walo ni ?a?a?a</i> string c fishing a fishing line	(Ivens 1918:142)
NGGE	<i>na vatu ni piniti</i> nm stone c anchor a stone for anchoring	(Ivens 1937:1082)
TIGA	<i>a mamana ot ina visvis</i> nm pl thing c fight fighting paraphernalia	(Beaumont 1979:129)
NAKA	<i>la sosole la luma</i> nm post poss:nm house a post of the house	(Johnston 1980:171)
MANA	<i>ʔi dua ne-Ø</i> key door poss-3s key to the door	(Lichtenberk 1983:295)

- BALA     *mayani yariki-na*  
 fish     poison-3s  
 fish poison     (Kolia 1975:134)

(b) Specialised connective morphemes:

- |      |  |                         |
|------|--|-------------------------|
| PAAM | <i>oai</i> <i>teni</i> <i>ahilu</i><br>water r      hair<br>hair dye                     | (Crowley 1982:111)      |
| PORT | <i>na-xaj</i> <i>a bungao</i><br>nm-tree r fence<br>fence post                           | (Charpentier 1979a:164) |
| BUGO | <i>na fata</i> <i>bali rio=riso</i><br>nm thing r      rd=write<br>writing paraphernalia | (Ivens 1935a:147)       |
| TOLA | <i>tabu</i> <i>na en</i><br>shellmoney r    fish<br>shellmoney for buying fish           | (Mosel 1980:88)         |
| LUSI | <i>ki</i> <i>atama</i> <i>aea</i><br>key door      r<br>the key for the door             |                         |

### (c) Juxtaposition

- |      |   |                   |
|------|---|-------------------|
| TANG | <i>taga m'aci</i><br>basket fish<br>fish basket     | (Ray 1926:360)    |
| BUGO | <i>na ŋoi roŋo</i><br>nm bag money<br>the money bag | (Ivens 1935a:150) |

(2) Location marked by specialised connective morphemes:

- |      |  |                       |
|------|--|-----------------------|
| PAAM | <i>iaate teni vuasi</i><br>yard c pig<br>pig yard                        | (Crowley 1982:221)    |
| AROS | <i>ruma ni ora</i><br>house c canoe<br>canoe house                       | (Capell 1971:37)      |
| LONG | <i>na vua ni mauru a-ŋgu</i><br>nm place c sleep poss-1s<br>my bed-place | (Ivens 1935b:612)     |
| VATU | <i>na vale ni moza</i><br>nm house c eat<br>the eating-house             | (Codrington 1885:544) |

- NGGE    *na ni-na vale ni roŋo*  
          nm poss-3s house c money  
          his money-house (Codrington 1885:500)
- na male-i kabu*  
          nm place-c sit  
          a place for sitting, a seat (Ivens 1937:1085)
- TOLA    *pal na kuk*  
          house c cook  
          kitchen (Mosel 1980:87)
- LUSI    *luma tahe aea*  
          house faeces c  
          outhouse

# APPENDIX VI

## MARKING ORIGIN

Origin phrases may be encoded using (a) possessive morphemes; (b) specialised connective morphemes; or (c) juxtaposition.

### (a) Possessive morphemes:

LENA	<i>ieram i-imwa Ioualmine</i> the.one loc-poss Ioualmine Ioualmine men	(Lynch 1978:39)
NGUN	<i>na-anoai ni Nuna</i> nm-man poss Nguna a man from Nguna	(Facey, personal communication)
AMBR	<i>vanten ne or Epi</i> man poss place Epi a man from Epi	(Paton 1971:40)
SA'A	<i>mwane ni Sa'a</i> man c Sa'a a Sa'a man	(Ivens 1918:142)
VATU	<i>no hoko ni Javo</i> nm speech c Savo the language of Savo	(Codrington 1885:544)
NGGE	<i>a Joseph ni Arimathea</i> nm Joseph c Arimathea Joseph of Arimathea	(Ivens 1937:1105)

### (b) Specialised connective morphemes:

PAAM	<i>molatine taai ten-aute Vaulelii</i> man one r-place Vauleli someone from Vauleli	(Crowley 1982:114)
TANG	<i>reti ta Tangoa</i> language r Tangoa the language of Tangoa	(Ray 1926:368)



RAGA	<i>ira atatu ata Raga</i> 3p man r Raga people from Raga	(Walsh 1978:189)
MOTA	<i>tanun ta Valuga</i> man r Valuga a Valuga man	(Codrington 1885:274)
AROS	<i>noni ni Heuru</i> man r Heuru a man of Heuru	(Capell 1971:15)
KWAI	<i>taʔa i asi</i> people loc coast the coastal people	(Keesing 1985:100)
BUGO	<i>na mara i Higota</i> nm people loc Higota the people of Higota	(Ivens 1935a:145)
LUSI	<i>tamine Kanada aea</i> woman Canada r a Canadian woman	
(c) Juxtaposition:		
TANG	<i>la mara Santo</i> 3p inhabitant Santo the Santo people	(Camden 1979:63)
TIGA	<i>a talatala Jemani</i> nm minister Germany a German minister	(Beaumont 1979:119)
TOLA	<i>a bul Niu Gini</i> nm child New Guinea a New Guinean child	(Mosel 1980:23)
BALA	<i>taloa vavine-ria</i> Saroa woman-3p Saroa women	(Kolia 1975:123)

## APPENDIX VII

### HABITUAL AGENT MARKING

Habitual agent marking includes (a) morphemes found in possessive phrases; (b) specialised constructions; and (c) juxtaposition.

#### (a) Possessive morphemes:

- |      |  |                                 |
|------|--|---------------------------------|
| NGUN | <i>na-atañoli ni na-vasa-ana laapa</i><br>nm-man c nm-speak-nom big<br>a talkative man | (Facey, personal communication) |
| NAMB | <i>dui na m'əkarien</i><br>man poss work<br>a worker, servant                          | (Fox 1979:37)                   |
| NGGE | <i>mane ni lutu</i><br>man c work<br>a working man, a worker                           | (Codrington 1885:535)           |
| NAKA | <i>la tahalo la igototolo-la</i><br>nm man poss:nm anger-nom<br>a man of anger         | (Johnston 1980:118)             |

#### (b) Specialised constructions:

- |      |   |                    |
|------|---|--------------------|
| LUSI | <i>tanta pam=pahano aea</i><br>man rd=steal r<br>thief                            |                    |
| PAAM | <i>uti-muni meleke-ene</i><br>hab:agent-drink milk-nom<br>a habitual milk drinker | (Crowley 1982:102) |

#### (c) Juxtaposition:

- |      |   |                                 |
|------|---|---------------------------------|
| NGUN | <i>na-atañoli vasa</i><br>nm-man speak<br>a talkative man | (Facey, personal communication) |
|------|---|---------------------------------|

TANG      *tamloxi* *xalu*  
man      lie  
a liar

(Camden 1979:86)

<i>tamloxi</i>	<i>xani</i>	<i>poi</i>
man	eat	pig
a man who likes to eat pork		

(Camden 1979:86)

BUGO      *na mane tajo*  
              nm man    work  
              a workman

(Ivens 1935a:143)

APPENDIX VIII  
MARKING GENDER

Gender is consistently marked by the juxtaposition of two nouns.

AMBR	<i>tesimre veen</i> child woman a little girl	(Paton 1971:23)
NGUN	<i>waango agoroi</i> pig woman sow	(Facey, personal communication)
TANG	<i>viriu xaƛai</i> dog woman bitch	(Camden 1979:84)
RAGA	<i>toa vavine</i> chicken woman hen	(Walsh 1978:188)
MOTA	<i>pwoe vavine</i> pig woman sow	(Codrington 1896:xv)
KWAI	<i>wela wane</i> child man male child	(Keesing 1985:95)
VATU	<i>ngari mane</i> child man a young man, boy	(Ivens 1935c:1085)
BUGO	<i>na vuŋao-ña na vaivine</i> nm in-law-3s nm woman his mother-in-law	(Ivens 1935a:151)
TIGA	<i>lakeak kapul</i> child girl a young girl	(Beaumont 1979:31)

TOLA     *a pap tutana*  
          nm dog man  
          male dog

(Mosel 1980:119)

LUSI     *gaea tamine*  
          pig woman  
          sow

MANA    *natu aine*  
          child woman  
          daughter

(Lichtenberk 1983:368)

BALA     *natu-na vala-na*  
          child-3s girl-sg  
          his daughter

(Kolia 1975:113)

# APPENDIX IX

## MARKING MATERIAL OF CONSTRUCTION

Material of construction is marked by (a) juxtaposition; or (b) connective morphemes.

(a) Juxtaposition:

NGUN	<i>na-suña kapa</i> nm-house metal house with corrugated iron roof	(Facey, personal communication)
PORT	<i>na-im na-marü</i> nm-house nm-coconut coconut leaf house	(Charpentier 1979a:167)
TANG	<i>ima rato</i> house sago a house with sago leaf thatch	(Camden 1979:84)
RAGA	<i>imwa vatu</i> house stone stone house	(Walsh 1978:187)
MOTA	<i>imwa vat</i> house stone stone house	(Codrington 1896:xviii)
VATU	<i>na vale vatu</i> nm house stone stone house	(Ivens 1935c:352)
NGGE	<i>na vale vatu</i> nm house stone stone house	(Codrington 1885:529)
BUGO	<i>na tabili gahira</i> nm vessel stone a vessel of stone	(Ivens 1935a:150)
LUSI	<i>luma patu</i> house stone stone house	

## (b) Connective morphemes:

NGUN	<i>na-suña ni kapa</i> nnn-house c metal house with corrugated iron roof	(Facey, personal communication)
PAAM	<i>liri-i-lau</i> drum-c- <i>nakatambol</i> drum of <i>nakatambol</i> wood	(Crowley 1982:91)
SA'A	<i>supi eni heu</i> club c stone a stone club	(Ivens 1918:144)
TOLA	<i>pal na kapa</i> house c metal house with corrugated iron roof	(Mosel 1980:87)
NAKA	<i>la luma la kapa</i> nm house poss:nm metal house made of corrugated iron	(Johnston 1980:171)

APPENDIX X  
TENSE MARKING

LENA	<i>r-im-va</i>	<i>nenav</i>	
	3s-pst-come	yesterday	
	he came yesterday		(Lynch 1978:49)
	<i>t-n-ak-ia-kin</i>	<i>nuw</i>	
	fut-2s-prog-d-eat	yam	
	you will eat yams		(Lynch 1978:43)
	<i>Iolu t-r-ep-va</i>		
	Iolu fut-3s-seq-come		
	Iolu will come later		(Lynch 1978:44)
TANN	<i>k-im-s-aan</i>	<i>nekw mufaam</i>	
	1n-pst-pl-eat	yam all	
	we ate all the yams		(Lynch 1982:14)
	<i>t-i-ak-ivgin</i>		
	fut-1s-prog-eat		
	I am going to eat		(Lynch 1982:12)
	<i>t-Ø-epi-ol</i>		
	fut-2s-seq-do		
	you will do it later on		(Lynch 1982:14)
SIE	<i>yay-am-a-ŋkil-i</i>	<i>etm-en</i>	
	1s-pres-irr-know-tr	father-3s	
	I know his father		(Lynch 1983:32)
NGUN	<i>e ga woo munu</i>		
	3s int fut	drink	
	he will drink		(Schütz 1969a:28)
	<i>a ga munu</i>		
	1s int	drink	
	I'll drink		(Schütz 1969a:26)
AMBR	<i>na-m</i>	<i>van</i>	
	1s-pres	go	
	I go		(Paton 1971:50)



- o-r van*  
 2s-pst go  
 you went (Paton 1971:51)
- b-o rɔ:ne*  
 fut-3s help:tr  
 he will help (Paton 1971:52)
- bwica o van?*  
 fut 2s go  
 will you go? (Paton 1971:52)
- RAGA *vanua nu siv maragasi nin tahi*  
 island pst just appear from sea  
 the island just appeared from the sea (Walsh 1981:374)
- na-m doron be na-v gita mulei-ni-a*  
 1s-vm want that 1s-fut see again-tr-3s  
 I want to see it again (Walsh 1981:377)
- MOTA *ni me vet si te van me*  
 3s pst say that fut go hither  
 he said that he will come (Tryon 1973:331)
- AROS *a haa tana-a huni a-i ŋau-a*  
 3s give to-3s that 3s-fut eat-3s  
 he gave it to him to eat (Capell 1971:78)
- SA'A *ne-ke lee-si-ʔo loʔu*  
 1s-fut see-tr-2s again  
 I shall see you again (Ivens 1918:68)
- KWAI *nau ta-ku leka*  
 1s fut-1s go  
 I will go (Keesing 1975:xx)
- LONG *ara ŋge lige-a*  
 3p fut sing-3s  
 they will sing (it) (Ivens 1935b:611)
- VATU *k-ara talu totu*  
 fut-3p three sit  
 they will sit (Ivens 1935c:359)
- NGGE *k-ara mua mai*  
 fut-3p neg come  
 they will not come (Codrington 1885:531)
- BUGO *ku-da taviti valiha*  
 1s-fut go day.after.tomorrow  
 I will go the day after tomorrow (Ivens 1935a:167)

- TIGA     *ga vis-i*  
           3s:pst hit-3s  
           he hit him (Beaumont 1979:74)
- gi inaŋ lo siva*  
           3s:npst go loc village  
           he is going into the village (Beaumont 1979:44)
- vo gi tapuok*  
           fut 3s:npst return  
           he will return (Beaumont 1979:83)
- TOLA     *u-na vana*  
           2s-fut go  
           you will go (Mosel 1980:124)
- BALA     *au a-bala-to*  
           1s 1s-dance-comp  
           I danced (Kolia 1975:154)
- au b-a-tagī*  
           1s pst-1s-cry  
           I cried (a while ago) (Kolia 1975:154)
- au ba-na-nuvi*  
           1s 1s-fut-dream  
           I'll dream (sometime later) (Kolia 1975:154)

# APPENDIX XI

## ABSENCE OF TENSE OR ASPECT MARKING

LENA	<i>i-is-kin-aan</i> 1s-neg-eat-neg I didn't eat it	(Lynch 1978:30)
SIE	<i>yi-tai lou nisyo-m</i> 3s-make canoe prep-2s he made a canoe for you	(Lynch 1983:55)
NGUN	<i>ku mari na-sava?</i> 2s do nm-what what are you doing?  <i>ku mari na-sava nanova?</i> 2s do nm-what yesterday what did you do yesterday?	(Facey, personal communication)  (Facey, personal communication)
PAAM	<i>kaie daji-si pistase</i> 3s cry-tr peanuts he is crying for peanuts  <i>ko-mu-uhi-n amaruu</i> 2s-r-blow-3s conch you blew the conch shell	(Crowley 1982:180)  (Crowley 1982:144)
AMBR	<i>na van</i> 1s go I will go	(Paton 1971:52)
PORT	<i>nö-ris-i xaing</i> 1s-see-tr 2s I see you  <i>xivur e-xan-i na-mbuas</i> old.man 3s-eat-tr nm-pig the old man ate pork	(Charpentier 1979a:54)  (Charpentier 1979a:70)
NAMB	<i>i-duduvah</i> 3s:r-play he is playing	(Fox 1979:54)

- n-le-i*  
1s:r-see-3s  
I saw him (Fox 1979:54)
- TANG *na rogo no-m reti*  
1s:r hear poss-2s talk  
I hear what you say (Camden 1979:55)
- tamloxi la sopo mai*  
man 3p:r neg come  
the men didn't come (Camden 1979:78)
- MOTA *iloke we poa nan tasi-na*  
this vm big prep brother-3s  
he is bigger than his brother (Codrington 1896:96)
- AROS *inau au ome-si-a*  
1s 1s see-tr-3s  
I see him (Capell 1971:16)
- ia ama-mu a hano?*  
nm father-2s 3s go  
did your father go? (Capell 1971:14)
- SA'A *mwala ko neku*  
people vm sit  
the people seat themselves (Ivens 1918:67)
- e ka'a ola ne-ke lee-si-e*  
3s neg thing 1s-vm see-tr-3s  
I saw nothing (Ivens 1918:50)
- KWAI *nau ku filo-a*  
1s 1s squeeze-3s  
I'm squeezing it (Keesing 1975:xxi)
- gai e kwa'i-a wane*  
3s 3s hit-3s man  
he hit the man (Keesing 1975:xv)
- LONG *ngira ara tarai-u*  
3p 3p teach-1s  
they are teaching/taught me (Ivens 1935b:611)
- VATU *ara panete na hau?*  
3p do nm what  
what are they doing? (Ivens 1935c:362)
- ara talu sesake*  
3p three go.up  
they (three) went up (Ivens 1935c:359)

- NGGE    *t-ara tagara*  
 vm-3p lost  
 they were lost (Ivens 1937:1088)
- BUGO    *k-u bosi ado-a*  
 vm-1s neg know-3s  
 I don't know (Ivens 1935a:160)
- k-u riso-a vani-gamu*  
 vm-1s write-3s to-2p  
 I wrote to you (Ivens 1935a:160)
- TOLA    *u pait ra ava?*  
 2s do:tr nm what  
 what did you do? (Mosel 1980:133)
- NAKA    *la hura puhu*  
 nm rain fall  
 it rained (Johnston 1980:82)
- LUSI    *ti-liliu pa eau*  
 3p-bathe loc water  
 they are bathing in the river
- Susui i-la soza?*  
 Susui 3s-go where  
 where did Susui go?
- MANA    *i-te-ʔamiŋ*  
 3s:r-see-2p  
 he saw you (Lichtenberk 1983:125)

# APPENDIX XII

## COMPLETIVE ASPECT MARKING

LENA	<i>t-m-iel r-n-mis ua?</i> pl-2s-friend 3s-comp-die or is your friend dead (or not)?	(Lynch 1978:50)
TANN	<i>mana l-ua-iva ta</i> bird 3s-comp-fly already the bird has flown away	(Lynch 1982:18)
SIE	<i>y-eni-su</i> 3s-eat-comp he has eaten	(Lynch 1983:34)
NGUN	<i>e poo munu sua</i> 3s comp drink already he has already drunk	(Schütz 1969a:27)
PAAM	<i>mate tai</i> 3s:die comp he has died	(Crowley 1982:225)
AMBR	<i>m-ε-me bur</i> pres-3s-come comp he has come	(Paton 1971:51)
PORT	<i>nivü e-mac inong</i> turtle 3s-die comp the turtle died/is dead	(Charpentier 1979a:91)
NAMB	<i>i-ta-mu sare-i</i> 3s:r-comp-cool comp-3s it has already cooled down	(Fox 1979:63)
TANG	<i>mo reti xini-a moiso</i> 3s:r speak prep-3s comp he has already spoken about it	(Camden 1979:105)
RAGA	<i>nu mate hupa</i> pst die comp he died	(Tryon 1973:332)

MOTA	<i>iragai me mate veta</i> 3p pst die comp they have died	(Codrington 1896:xx)
AROS	<i>a taha no'a</i> 3s arrive comp he has arrived	(Capell 1971:26)
SA'A	<i>e ŋaa ʔoto?</i> 3s eat comp has he eaten?	(Ivens 1918:76)
KWAI	<i>e mae no'o</i> 3s die comp he is dead	(Keesing 1985:120)
LONG	<i>ioe o vwai-ra na</i> 2s 2s smite-3p comp thou hast smitten them	(Ivens 1935b:614)
VATU	<i>ara mate noho</i> 3p die comp they are dead	(Codrington 1885:543)
NGGE	<i>t-ara ganagana me te mate tua</i> vm-3p think and vm die comp they thought he was dead	(Ivens 1937:1106)
BUGO	<i>ke ðeke gohi</i> vm die comp he is dead	(Ivens 1935a:177)
	<i>ke vula hi</i> vm come comp he has come	(Ivens 1935a:154)
	<i>ke vaðe-he-ra ŋgovu</i> vm kill-tr-3p comp he killed them all out	(Ivens 1935a:160)
TIGA	<i>ga pon kus-imem</i> 3s:pst comp tell-1x he has told us	(Beaumont 1979:78)
TOLA	<i>i tar mat</i> 3s comp die he has died; he is dead	(Mosel 1984:110)
NAKA	<i>la lima-gu taritigi-ti</i> nm hand-1s good-comp my hand has healed	(Johnston 1980:172)

LUSI     *ti-mate gasili*  
 3p-die comp  
 they are dead

MANA     *natu i-laba-doi*  
 child 3s:r-big-comp  
 the child has grown up

(Lichtenberk 1983:202)

BALA     *au-na yia a-ywadu-a-to*  
 1s-sm 3s 1s-spear-3s-comp  
 I speared it

(Kolia 1975:151)

*yita ywarau b-ite-yumu*  
 1n already pst-1n-hide  
 we have hidden already

(Kolia 1975:156)



# APPENDIX XIII

## IMPERFECTIVE MARKING

The progressive, durative and habitual aspects in MNAN languages are marked by: (a) aspect affixes (including the present progressive tense/aspect in Sie); (b) free aspect morphemes; (c) reduplication; (d) repetition; and (e) co-verbs.

(a) Imperfective marked by aspect affixes:

LENA	<i>i-ak-kɪn kapis</i>	
	1s-hab-eat cabbage	
	I eat cabbage	(Lynch 1978:48)
	<i>r-am-uah</i>	
	3s-dur-cook	
	she is cooking	(Lynch 1978:10)
	<i>i-ak-am-ol kɪnu</i>	
	1s-prog-dur-make canoe	
	I am making a canoe	(Lynch 1978:45)
TANN	(iou) <i>i-ak-am-nɪm</i>	
	(1s) 1s-prog-dur-drink	
	I am drinking	(Lynch 1982:14)
SIE	<i>se ɣ-am-n-omp-i?</i>	
	what 3s-pres-irr-do-tr	
	what is he doing?	(Lynch 1983:39)
PORT	<i>e-ri-pac</i>	
	3s-prog-sleep	
	he is sleeping	(Charpentier 1979a:159)
NAMB	<i>kə-v-mu-həp'=həp'il</i>	
	2-pl-hab-rd=lie	
	you people are liars	(Fox 1979:68)
BALA	<i>au a-ɣaniyani-a-ni</i>	
	1s 1s-eat-3s-prog	
	I am eating it	(Kolia 1975:114)

*vanua tau-ria dubu-yana ye-ago-ni pula mabara-ria-ai*  
 village man-pl church-to 3p-go-hab week all-pl-loc  
 the villagers go to church every week (Kolia 1975:133)

*ye-re-ago-yoni pula roro-ria-ai*  
 3p-pst-go-hab week every-pl-loc  
 they used to go every week (Kolia 1975:133)

(b) Imperfective marked by free morphemes:

NGUN *e too munu*  
 3s prog/hab drink  
 he is drinking; he drinks (Schütz 1969a:29)

AMBR *ra-m ye kerir*  
 3p-pres prog sing  
 they are singing (Paton 1971:55)

TANG *mo lo curuvi*  
 3s:r prog sleep  
 he is lying down (Camden 1979:56)

*xaratu posi-na, i efi reti soxena*  
 that manner-3s 3s:irr hab talk thus  
 that's his manner, he talks like that (Camden 1979:59)

MOTA *o manu te ro=rowo ti*  
 nm bird fut rd=fly dur  
 the birds kept flying off (Codrington 1896:xix)

*o gaviga ti tawaga alo rara*  
 nm Malay.apple hab flower in coral.tree  
 Eugenia flowers in the coral tree season (Tryon 1973:331)

NGGE *ma t-ara vaŋa soo*  
 and vm-3p eat prog  
 while they were eating (Ivens 1937:1104)

TOLA *u la vana*  
 2s hab go  
 you usually go (Mosel 1980:124)

(c) Imperfective marked by reduplication:

LENA *uus aan r-mis=mis nian miin*  
 man that 3s-rd=sick time pl  
 that man is sick all the time (Lynch 1978:89)

PAAM *kaile a-munu=munu vaulelii*  
 3p 3p-rd=drink Vauleli  
 they are drinking at Vauleli (Crowley 1982:190)

- kaie vane=hane enaute vasile*  
3s rd=copulate place all  
he is promiscuous (Crowley 1982:153)
- AMBR *na-m en=en-ne*  
1s-pres rd=eat-tr  
I have been eating it (Paton 1971:62)
- MOTA *ni we taŋ=taŋ apesa?*  
3s vm rd=cry why  
why is he crying? (Codrington 1885:280)
- AROS *a ama-gu a ta=tauaro*  
nm father-1s 3s rd=work  
my father is working (Capell 1971:41)
- SA'A *e ?ure=?ure ko raraŋi*  
3s rd=stand vm warm  
he stood warming himself (Ivens 1918:110)
- KWAI *la age=age-a kee sui*  
3p rd=do-3s until finished  
they kept on doing it until it was all finished (Keesing 1985:121)
- NGGE *inau t-u taŋi=taŋi sule ŋaŋata*  
1s vm-1s rd=cry big very  
I cried a lot (Ivens 1937:1094)
- TIGA *rik ais=aisok*  
3p:npst rd=work  
they kept on working (Beaumont 1979:93)
- TOLA *u ia=ian kau-gu vudu*  
2s rd=eat poss-1s banana  
you are eating my bananas (Mosel 1980:102)
- pa dia puna=punaŋ diat*  
neg 3p rd=bury 3p  
they do not bury their dead (Mosel 1980:102)
- NAKA *e tete av=avu la ia*  
nm father rd=wrap nm fish  
father is wrapping the fish (Johnston 1980:156)
- eia sa=sapa te la kavikoki*  
3s rd=sweep prep nm morning  
she sweeps in the mornings (Johnston 1980:131)
- LUSI *ŋa-sim=simi ga mao*  
1s-rd=seek and not  
I was looking for it but didn't find it

- MANA *maŋ di-ʔaŋ=ʔan-i*  
 chicken 3p:r-rd=eat-3s  
 they are eating a chicken (Lichtenberk 1983:146)
- bon teʔe teʔe i-duma=duma-ya*  
 time one one 3s:r-help=rd-1s  
 now and then he helps me (Lichtenberk 1983:196)
- (d) Durative marked by repetition:
- LENA *i-im-asumw m-asumw m-n-apou*  
 1s-pst-work and-work and-comp-tired  
 I kept working in the garden until I was tired (Lynch 1978:50)
- TANN *ai in l-am-aiu okwupwin m-u-aiu m-u-aiu*  
 this 3s 3s-prog-run ahead and-d-run and-d-run  
 she ran in front and kept on running (Lynch 1982:59)
- NGUN *eu sale sale sale paa paa ʔo eu mawosa*  
 3p dance dance dance until until then 3p tired  
 they kept dancing until they were exhausted (Facey, personal communication)
- PAAM *mule mule mule vo maso*  
 stay stay stay until cooked  
 It stayed there until it was cooked (Crowley 1982:261)
- NAMB *a-r-lak da-v'a da-v'a ka-r-ier lihalm'au*  
 3p:r-d-stay prog-go prog-go and-d-reach midday  
 they both stayed until midday (Fox 1979:111)
- KWAI *e aʔo noʔo, aʔo, ma ka aʔo ma ka baba noʔo*  
 3s crawl comp crawl and 3s crawl and 3s duck.down comp  
 he crawled, crawled and crawled, then ducked down (Keesing 1988a:238)
- ... lee=leka, lee=leka ma ka ria-si-a rua boo*  
 rd=go rd=go and 3s see-tr-3s two pig  
 (he crawled) for some time and saw two pigs (Keesing 1988a:238)
- VATU *aia e vano m-e vano m-e vano*  
 3s vm go and-vm go and-vm go  
 he went on and on (Ivens 1935c:369)
- NGGE *k-e vaa m-e vaa*  
 fut-3s go and-vm go  
 it will go on and on (Ivens 1937:1095)
- BUGO *m-ena uli-a m-ena uli-a horu*  
 and-3p lower-3s and-3p lower-3s down  
 and they kept lowering him down (Ivens 1935a:174)
- TIGA *reg-a pasal, reg-a kaul, reg-a kaul, kaul, kaul*  
 3p-pst go.on 3p-pst paddle 3p-pst paddle paddle paddle  
 they went on, they kept rowing (Beaumont 1979:125)

- |                                      |   |
|--------------------------------------|---|
| TOLA                                 | <i>ma i vana ma i vana ma i vana ma i tur</i><br>and 3s go and 3s go and 3s go and 3s stand<br>and she walked for a long time and finally stopped (Mosel 1980:108)                |
| NAKA                                 | <i>eia hari, hari, hari, go-ata-e</i><br>3s run run run go-up-here<br>it travelled on and on, climbing (Johnston 1980:120)  |
| LUSI                                 | <i>ŋa-simi ga ŋa-simi ga ŋa-simi ga mao</i><br>1s-look and 1s-look and 1s-look and not<br>I kept on looking for it, but I didn't find it  |
| MANA                                 | <i>u-malipi u-la'o u-la'o-be ura i-pura</i><br>1s:r-work 1s:r-go 1s:r-go-and rain 3s:r-come<br>I was working, working, when suddenly it started to rain<br>(Lichtenberk 1983:201) |
| (e) Imperfective marked by co-verbs: |   |
| SIE                                  | <i>m-ete-ŋi n-alan̄kau</i><br>and-stay-tr nom-look.around<br>and (she) kept looking around (Lynch 1983:69)  |
| PAAM                                 | <i>kaie mule re=demi</i><br>3s stay rd=think<br>he is thinking (Crowley 1982:187)   |
| AMBR                                 | <i>m-a helal ru</i><br>pres-3s lost stay<br>it is lost (and remains so) (Paton 1971:55)   |
|                                      | <i>me-m van yo mün=mün</i><br>1x-pres go prog rd=drink<br>we keep on drinking (Paton 1971:66)   |
| NAMB                                 | <i>a-v-rp-i da-v'a ti i-valau</i><br>3p:r-pl-hit-3s prog-go that 3s:r-cry<br>they kept hitting him until he cried (Fox 1979:87)   |
| TIGA                                 | <i>reg-a polok pas=pasal</i><br>3p-pst grow rd=go.on<br>they kept growing (Beaumont 1979:124)   |
| MANA                                 | <i>ŋau u-malipi=lipi-be u-soa'i-be ura i-pura</i><br>1s 1s:r-work=rd-and 1s:r-sit-and rain 3s:r-come<br>as I was working, it started to rain (Lichtenberk 1983:198)               |
|                                      | <i>i-pile-la-be i-eno</i><br>3s:r-talk-just-and 3s:r-lie<br>he just kept talking (Lichtenberk 1983:200)   |
| BALA                                 | <i>godio tau-na ye-na witali royo pululu-ago-a-to</i><br>sorcery man-sg poss-3s whistle still blow-go-3s-comp<br>the sorcerer kept on blowing his whistle (Kolia 1975:222)        |

APPENDIX XIV  
IRREALIS MARKING

Irrealis may be shown by (a) pronouns or verb root alternations; or (b) free morphemes or affixes.

(a) Pronouns or verb root alternations indicating irrealis:

SIE	<i>hai neteme yo-velam</i> one man 3s-come a man came	(Lynch 1983:47)
	<i>y-a-mpelam mran?</i> 3s-irr-come tomorrow will he come tomorrow?	(Lynch 1983:63)
PAAM	<i>na-gilele-n sau-ene</i> 1s:r-know-3s sing-nom I know the song	(Crowley 1982:143)
	<i>ma-haa Liiroo keeke</i> 1s:imm-go Liro now I am going to Liro now	(Crowley 1982:137)
	<i>ni-matilu veni isei?</i> 1s:dis-sleep with who who will I be staying with?	(Crowley 1982:191)
NAMB	<i>n-le-i</i> 1s:r-see-3s I saw him	(Fox 1979:54)
	<i>p'a-lu</i> 1s:irr-vomit I shall vomit	(Fox 1979:56)
TANG	<i>na rogo no-m reti</i> 1s:r hear poss-2s talk I hear what you say	(Camden 1979:55)
	<i>a sopo xalu-xo</i> 1s:irr neg lie-2s I won't mislead you	(Camden 1979:57)

- MANA    *tamoata boro i-te-di*  
 man      pig    3s:r-see-3p  
 the man saw the pigs (Lichtenberk 1983:119)
- ʔa-lale      anua-lo*  
 3s:irr-walk village-to  
 she will walk to the village (Lichtenberk 1983:487)
- (b) Irrealis (or future tense) shown by free morphemes or affixes:
- NASA    *kai kørnø na-mbør-mas*  
 fut 1s    1s-irr-die  
 I will die (Charpentier 1979b:351)
- TOLA    *gala na bata!*  
 irr    fut rain  
 if only it would rain! (Mosel 1984:113)
- NAKA    *eia ge tuga*  
 3s   irr go  
 he will depart (Johnston 1980:63)
- LUSI    *teta paze tau ta-la*  
 some again irr 1n-go  
 we'll go soon
- MANA    *masa ʔaba m-pura*  
 irr    again 1s:irr-come  
 I will come again (Lichtenberk 1983:186)
- ura ʔa-pura      ʔana*  
 rain 3s:irr-come pros  
 it is going to rain (Lichtenberk 1983:192)

## APPENDIX XV

### SUBJECT REFERENCING

To demonstrate the widespread use of subject referencing in MNAN languages, sample sentences are provided below, which possess redundant third person referencing pronouns or verb markers, occurring either after the interrogative pronoun *who* or after a subject noun phrase.

LENA	<i>pehe r-im-os nau taha-k?</i> who 3s-pst-take knife poss-1s who took my knife?	(Lynch 1978:97)
TANN	<i>pa l-imn-ol?</i> who 3s-pst-do who did it?	(Lynch 1982:26)
SIE	<i>me y-oyh-oyoh?</i> who 3s-see-1n who saw us?	(Lynch 1983:39)
NGUN	<i>seei e umai?</i> who 3s come who came?	(Facey, personal communication)
AMBR	<i>si t-ε me?</i> who pst-3s come who came?	(Paton 1971:19)
PORT	<i>amas e-mangin, ina e-lös-i</i> baby 3s-dirty mother 3s-wash-tr the baby is dirty, the mother washes it	(Charpentier 1979a:57)
NAMB	<i>hin ak i-valau?</i> 3s who 3s:irr-cry who is crying?	(Paton 1971:100)
TANG	<i>tama-ku mo sile tavai-ku xin lep'a sei</i> father-1s 3s:irr give brother-1s prep ground this my father gave this piece of ground to my brother	(Camden 1979:99)
RAGA	<i>ira atatu ata Raga ra-m ilo gagaruva</i> pl man c Raga 3p-vm know swim people from Raga know how to swim	(Walsh 1978:89)



- MOTA     *o gasuwe we toga alo pwarangi-na*  
 nm rat        vm stay loc hole-3s  
 a rat stays in its hole  
 (Codrington 1885:261)
- AROS     *ira tei rau boi no'a?*  
 pl who 3p come comp  
 who has come?  
 (Capell 1971:31)
- SA'A     *kira tei kire lae?*  
 3p who 3p go  
 who went?  
 (Ivens 1918:46)
- KWAI     *ta'a i 'ai'eda (gila) la saka no'o i asi*  
 people c 'Ai'eda (3p) 3p go.down comp loc sea  
 the 'Ai'eda people went down to the sea  
 (Keesing 1975:xxv)
- VATU     *hira sei ara kavi hira*  
 3p who 3p carve 3p  
 those who carve them  
 (Ivens 1935c:365)
- NGGE     *a Manoga te sule ta a Laukona*  
 nm Manoga 3s:vm big prep nm Laukona  
 Manoga is bigger than Laukona  
 (Ivens 1937:1094)
- BUGO     *ara hai na maraira kedana taviti?*  
 3p who vm 3p 3p:fut go  
 who are they that will go?  
 (Ivens 1935a:145)
- TIGA     *na-si ga vis-i?*  
 nm-who 3s:npst hit-3s  
 who hit him?  
 (Beaumont 1979:47)
- TOLA     *To Karvuvu i gir-e ra en*  
 To Karvuvu 3s see-tr nm fish  
 ToKarvuvu saw the fish  
 (Mosel 1980:113)
- LUSI     *sei i-rau-go?*  
 who 3s-hit-2s  
 who hit you?
- MANA     *naita taun-lo i-la'o?*  
 who town-to 3s-go  
 who went to town?  
 (Lichtenberk 1983:399)
- BALA     *rai b-ei-agomai?*  
 who pst-3s-come  
 who came?  
 (Kolia 1975:122)

# APPENDIX XVI

## TRANSITIVE MARKING

Transitive marking in MNAN languages may involve (a) a suffix (transitive or remote transitive); or (b) an anticipatory object.

(a) Transitive suffixes:

LENA	<i>i-ak-am-ign-ín uus aan</i> 1s-prog-dur-fear-tr man that I am afraid of that man	(Lynch 1978:31)
TANN	<i>l-ímn-am-kwasig-kín</i> 3s-pst-dur-follow-tr she was following him	(Lynch 1982:51)
SIE	<i>y-amtit-onji Lui</i> 3s-r:fear-tr Lui he was frightened of Lui	(Lynch 1983:32)
NGUN	<i>e munu-ŋi a</i> 3s drink-tr 3s he drank it	(Schütz 1969a:36)
PAAM	<i>na-le-si Maile</i> 1s:irr-see-tr Mail I saw Mail	(Crowley 1982:143)
PORT	<i>ki-xan-i mbuang</i> 2s-eat-tr taro you ate the taro	(Charpentier 1979a:57)
	<i>tö-pisax-i-ni na-ndram a nain</i> 3p-give-tr-remtr nm-yam c child they gave yams to the children	(Charpentier 1979a:79)
TANG	<i>egko ko vuca-gi-au cini-a</i> 2s 2s teach-tr-1s prep-3s you taught me about it	(Camden 1979:66)
MOTA	<i>neira me tau-r paso o imwa</i> 3p pst build-tr finish nm house they built the house	(Codrington 1896:xx)

- neira me mate-vag o vuru*  
 3p pst die-remtr nm cough  
 they died of a cough  
 (Codrington 1896:xx)
- AROS *au ome-si-ʔo*  
 1s see-tr-2s  
 I saw you  
 (Capell 1971:67)
- SA'A *no-ko lai lee-si-e*  
 1s-vm go:loc see-tr-3s  
 I went to see it  
 (Ivens 1918:49)
- KWAI *ŋaia ka aga-si-nau*  
 3s 3s see-tr-1s  
 he saw me  
 (Keesing 1975:xv)
- LONG *amu ŋge mae-ani-a*  
 2p fut die-remtr-3s  
 you will die of it  
 (Ivens 1935b:619)
- VATU *ara labu mate-si-a*  
 3p hit kill-tr-3s  
 they beat him to death  
 (Codrington 1885:544)
- NGGE *k-u inu-vi-a na beti*  
 fut-1s drink-tr-3s nm water  
 I will drink the water  
 (Codrington 1885:531)
- BUGO *k-u sabi-ri-a i Marau*  
 vm-1s buy-tr-3s loc Marau  
 I bought it in Marau  
 (Ivens 1935a:155)
- TIGA *rig-a viakon eul-an-i*  
 3p-pst afraid very-remtr-3s  
 they were very afraid of him  
 (Beaumont 1979:92)
- LUSI *ŋa-tora-ni le-gu uzage*  
 1s-grind-tr poss-1s knife  
 I filed my knife
- MANA *u-rapu=rapu-ŋ-i*  
 1s:irr-rd=wait-tr-3s  
 I am waiting for him  
 (Lichtenberk 1983:145)
- (b) Anticipatory object:
- SIE *yoy-orŋ-i nompyahi*  
 1s-hear-3s pig  
 I heard the pig  
 (Lynch 1983:32)
- PAAM *a-duvo-n amanu*  
 3p-shoot-3s bird  
 they shot birds  
 (Crowley 1982:143)

	<i>na-loŋe-e siiti</i> 1s-hear-3s Siti I heard Siti	(Crowley 1982:143)
NAMB	<i>n-pate-i a mlin uaki</i> 1s:r-praise-3s nm chief only I'm just praising the chief	(Fox 1979:28)
AROS	<i>au ome-si-a i noni</i> 1s see-tr-3s nm man I saw the man	(Capell 1971:67)
SA'A	<i>hote-laʔini-e ʔiola</i> paddle-remtr-3s canoe paddle a canoe	(Ivens 1918:160)
KWAI	<i>ŋai e kwa-ʔi-a wane</i> 3s 3s hit-tr-3s man he hit the man	(Keesing 1975:xv)
VATU	<i>vose-lahini-a na vaka</i> paddle-remtr-3s nm canoe paddle a canoe	(Codrington 1885:543)
NGGE	<i>te kisu-a na vale</i> 3s:vm build-3s nm house he builds the house	(Codrington 1885:523)
BUGO	<i>k-ati regi-a na vaka</i> vm-1n see-3s nm ship we saw the ship	(Codrington 1885:549)
TIGA	<i>taŋ anu gi vis-i taŋ piu</i> nm man 3s hit-3s nm dog the man is hitting the pig	(Beaumont 1979:39)
NAKA	<i>e Baba kue-a la paia</i> nm Baba hit-3s nm dog Baba stuck the dog	(Johnston 1980:54)
MANA	<i>niu i-sere-ʔ-i</i> coconut 3s:irr-break-tr-3s he broke the coconut	(Lichtenberk 1983:129)
BALA	<i>au-na melo a-kwari-a-ni</i> 1s-sm boy 1s-hit-3s-dur I am hitting the boy	(Kolia 1975:37)

# APPENDIX XVII

## SERIAL VERBS

LENA	<i>r-im-aliuok m-vin apwa lenakil</i> 3s-pst-walk and-go loc Lenakel he walked to Lenakel	(Lynch 1978:21)
TANN	<i>tukw-l-lih nekw m-vin m-am-itu-pin</i> fut-3s-carry yam and-go and-cont-put-away he will take the yams and put them there	(Lynch 1982:21)
NGUN	<i>e tape a umai</i> 3s take 3s come he brought it	(Facey, personal communication)
	<i>e tape a pano</i> 3s take 3s go he took it away	(Facey, personal communication)
PAAM	<i>a-mu-ali vaa eni leiai</i> 3p-irr-walk go loc bush they walked into the bush	(Crowley 1982:206)
AMBR	<i>heŋe-ne van</i> send-tr go send away	(Paton 1971:62)
NAMB	<i>i-ui-r-ma</i> 3s:r-carry-c-come he brings it	(Fox 1979:68)
TANG	<i>la ali-a v'ano</i> 3p:r carry-3s go they carried him forth	(Ray 1926:367)
MOTA	<i>tur sua ma ape tapwaji aka</i> 2p paddle come loc side ship paddle here to the side of the ship	(Codrington 1885:297)
AROS	<i>ʔo haʔaatari-a mai</i> 2s send-3s hither send him here	(Capell 1971:82)

- |      |   |                        |
|------|---|------------------------|
| KWAI | <i>kwate-a mai fa-gu</i><br>give-3s hither to-1s<br>give it to me   | (Keesing 1985:132)     |
| NGGE | <i>ngaia te vete-nau inau mai</i><br>3s 3s:vm send-1s 1s come<br>he sent me hither  | (Codrington 1885:526)  |
| BUGO | <i>ngi e tala-ŋi-a mai</i><br>fut 3s:vm bring-tr-3s come<br>let him bring him hither  | (Ivens 1935a:161)      |
| TIGA | <i>ga ŋai alak-i</i><br>3s:pst pull go.up-3s<br>he pulled it up   | (Beaumont 1979:129)    |
| TOLA | <i>i pil irop</i><br>3s jump come.down<br>it jumped down  | (Mosel 1984:122)       |
| NAKA | <i>gite tuga go-rivo luku=luku</i><br>3p walk go-garden rd=dig.taro<br>they went to the garden and dug taro                   | (Johnston 1980:190)    |
| LUSI | <i>u-sere gaea i-la</i><br>2s-remove pig 3s-go<br>get the pig out of here   |                        |
| MANA | <i>aine rua tabira ma'a di-do?-i-mai-ru</i><br>woman two dish here 3p:r-take-3p-hither-d<br>two women brought the dishes here | (Lichtenberk 1983:583) |

## NOTES

1. 'Melanesian' is used by some authors as a linguistic term referring usually to the Austronesian languages of Melanesia, and by other authors to refer to the geographic region which includes Papua New Guinea, the Solomon Islands, New Caledonia, Vanuatu and Fiji. The linguistic usage is often ambiguous, as both Austronesian and non-Austronesian languages are found in Melanesia. In this study, 'Melanesia' is used with the geographic meaning, and the term 'Melanesian Austronesian' (or MNAN) is used to refer to the Austronesian languages spoken in Melanesia.
2. *Kanaka* is a Hawaiian word meaning 'man'. It entered Tok Pisin with the meaning 'indigenous person', although Europeans in the past have tended to use it as a derogatory term. The form of pidginised English spoken by Melanesians in Queensland is sometimes called 'Kanaka English' (Mühlhäusler 1981).
3. For Bickerton, creoles 'arose out of a prior pidgin which had not existed for more than a generation' and 'arose in a population where not more than 20 percent were native speakers of the dominant language and where the remaining 80 percent were composed of diverse language groups' (1981:4). Bickerton's definition allows him to constrain membership of languages in the class of creoles to those which follow his proposed model of creolisation. By his definition Tok Pisin is excluded from this class.
4. Lusi and its cogeners Kove and Kabana are unusual among MNAN languages in that the third person singular possessive pronoun is a prefix instead of a suffix.
5. For recent discussions of the irrealis/future marker, the reader should see Jourdan (1986) regarding the development of *bae* in Pijin, and Keesing's (1988a:182ff) refutation of the development of Tok Pisin *ba* described in Sankoff and Laberge (1980).
6. For a discussion of the form *olgeta* (from *altogether*) which is used in Pijin and some Bislama dialects, see Keesing (1988a:140ff).
7. Counts (1969:70) treats Lusi *-ni* as a third person singular object pronoun, one of three morphologically conditioned allomorphs: */-Ø ~ -ni ~ -i/*. My own analysis treats *-Ø* as the third person singular object pronoun, *-ni* as a transitive suffix found on a restricted number of verbs, and *-i* as a third person reflexive pronoun. Compare the following sentences:

LUSI        *ŋa-kona-Ø*  
               1s-see-3s  
               I saw him/her/it

LUSI        *tna-gu    i-kona-i*  
               mother-1s 3s-see-reflex  
               my mother saw herself

There are several arguments for this analysis:

- (1) the third person singular object pronoun  $-\emptyset$  is invariable, and so an explanation based on morphological conditioning is unnecessary;
- (2) *-i* and *-ni* are different morphemes and as such they fill the same slot:

LUSI        *ŋa-sura-ni    eau*  
               1s-spill-tr    water  
               I spilled the water

LUSI        *eau    i-sura-i*  
               water 3s-spill-reflex  
               the water spilled (itself)

- (3) *-ni* may be followed by first or second person pronouns, as in:

LUSI        *ŋa-mura-ni-gau*  
               1s-hide-tr-1s  
               I hid (myself)

- (4) historically, *-ni* appears to be derived from the POC transitive suffix *\*-Caki(ni)* (Pawley 1973:171), and cognate suffixes can be found in other MNAN languages. Cognates in Siasi languages related to Lusi occasionally vary in the presence or absence of this suffix (e.g. KABA, KILE *loŋo*, but GITUA *loŋon*, LUSI, KOVE *loŋoni* 'hear').

Chowning suggests that the same suffix in Kove, a closely related language, 'is not a transitive marker' (1973:238); however, she later comes to a similar conclusion regarding the suffix as in my analysis of Lusi:

A few examples in Kove suggest that suffixed *-hani*, *-ani*, or *-ni* may make an intransitive verb transitive: *suhai* 'to spill'; *suhani* 'to pour out'. If this interpretation is correct, both this form and Tolai *-ane* may derive from POC *\*-aki(ni)*... (1978:1154)



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